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Prediction in Psychotherapy Research
A Method for the Transformation of Clinical Judgments into Testable Hypotheses

HELEN D. SARGENT, LEONARD HORWITZ,
ROBERT S. WALLERSTEIN
and ANN APPELBAUM

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A Method for the Transformation of Clinical Judgments into Testable Hypotheses

by

HELEN D. SARGENT, LEONARD HORWITZ, ROBERT S. WALLERSTEIN, *and* ANN APPELBAUM

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The preparation and presentation of this monograph, though undertaken by the project members most directly responsible for the particular area of project activity, reflects as well the thinking and working of all the project members over this entire span of years. In addition to the principal authors they are: Stephen A. Appelbaum, Ph.D.; Esther Burstein, Ph.D.; Lolafaye Coyne, M.A.; Gerald A. Ehrenreich, Ph.D. (Kansas City, Missouri); Michalina Fabian, M.D.; Mildred T. Faris, M.S.W. (Berkeley, California); Helene D. Gerall, Ph.D. (New Orleans); Gerard V. Haigh, Ph.D. (Los Angeles); Bernard H. Hall, M.D.; Otto F. Kernberg, M.D.; Lester Luborsky, Ph.D. (Philadelphia); T. W. Mathews, M.A. (Lawrence, Kansas); Martin Mayman, Ph.D.; Herbert C. Modlin, M.D.; Gardner Murphy, Ph.D.; Marjorie Orth, M.S.S.; Lewis L. Robbins, M.D. (New York, New York); Irwin C. Rosen, Ph.D.; the late Richard S. Siegal, Ph.D.; Sydney Smith, Ph.D.; William Tarnower, M.D.; Ernst Ticho, Ph.D.; Gertrude R. Ticho, M.D.; and Harold M. Voth, M.D. We also gratefully acknowledge an unmeasured debt to the consultants who contributed so enormously to the stimulation and the refinement of the ideas developed in this work: David Bakan, Ph.D. (Chicago); the late John D. Benjamin, M.D. (Denver); and Wayne H. Holtzman, Ph.D. (Austin, Texas). And there is a special debt to our resourceful and indefatigable secretaries who mastered the intricacies of our Prediction Study

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PREFACE

This presentation of the concepts of the Prediction Study and of their operational implementation reflects to a major extent the thinking of the senior author, Helen D. Sargent. The development of the individual Prediction Study as a central aspect of our Psychotherapy Research Project was in accord with Dr. Sargent's conviction that psychotherapeutic processes could be studied predictively as well as postdictively, and that such study would be not only consonant with the clinical viewpoint but, even more, a logical and systematic extension of what is at least *implicitly* a constant and integral part of ordinary diagnostic and therapeutic clinical practice—the making of clinical predictions by clinician judges. In response to this conviction, Dr. Sargent worked to devise the system here presented, anchored in the rules of formal logic, for the translation of discursive clinical predictive judgments (embedded in all the usual clinical qualifications) into formalized, testable predictions in accord with a tripartite (if-then-because) logical model. In this system, each prediction is stated with the conditions under which it holds, the contingencies to which it relates, and the assumptions (grounded in observation and in theory) on which it is based. The events or judgments which will subsequently be necessary to confirm or refute it are specified in advance. So stated, each prediction permits a tracing back of the inferential process through which it came into being, so that each prediction, whether correct or false, can generate knowledge concerning the inferences made and the phenomena giving rise to them.

In this work, Dr. Sargent was very early joined by the second author, Dr. Horwitz. The current form of the tripartite model for the formal study of prediction (the vicissitudes of which are described in the text) represents the final distillation of their joint thinking.

Dr. Wallerstein, as chairman of the project, undertook throughout to articulate this formal analysis of the clinical prediction process with the total operations of the entire project, an over-all naturalistic study of change in psychotherapy, in which all methods of approach used, clinical, logical, and statistical, would be congenial both to the central processes they were designed to illuminate and to each other.

Upon Dr. Sargent's death (December 25, 1959), Dr. Wallerstein assumed responsibility for her unfinished manuscripts and, together with Dr. Horwitz, undertook to complete this monograph. At the time, most of the ideas of this publication had been arrived at, and most of the differences in emphasis reconciled. The actual work of the Prediction Study was well under way. Drafts existed of most of the sections of this monograph; the first sections existed in multiple drafts of varying degrees of polish, the last section only as sketchy aggregates of memoranda, trial statements, and records of conferences, both intramural and with consultants. With the invaluable assistance of Mrs. Sarah Hunt in deciphering Dr. Sargent's marginal and scattered notes written in her self-devised speedwriting, it was possible to recreate, as closely as one can for others, Dr. Sargent's own reasoning processes and linguistic preferences. Where gaps have been bridged, integrative material introduced, and new observations or inferences added, these have as much as possible been as Dr. Sargent would have approved, if not necessarily just as she would have written. The final editorial revisions (and condensations) have been the work of Dr. Horwitz and of Dr. Ann Appelbaum, who joined him in carrying out the Prediction Study.

INTRODUCTION

Every responsible action in diagnosis and treatment involves one or more predictions derived from clinical experience or from theoretical hypotheses. When the clinical team in a case conference assigns a patient to treatment, a prediction is implied; the course recommended is expected to benefit the patient in certain ways, some of which are more, some less, spelled out in case discussion. In such deliberations, many other predictions are made, implicitly or explicitly, relating to possible contraindications, vicissitudes of the treatment course, and/or specific outcomes to be hoped for. Furthermore, clinical predictions, followed by observations of the course and outcome of therapy, provide myriad potential experiments which could test the hypotheses by which the predictions and treatment recommendations were guided.

Recommendations and case formulations conveyed by supervisors to therapists in training, and dynamic formulations in psychological test reports, also involve prediction. If a particular approach is suggested, a given response is anticipated. If a patient is placed in a diagnostic category, reactions, symptoms, and special characteristics belonging to that category are implied. Diagnosis is meaningless unless oriented toward prediction; that is, there is little use in labeling a patient as hysterical, obsessive-compulsive, or paranoid unless the label carries some connotations about what may be expected in the development of the illness and in the treatment course. The label "paranoid," for example, implies that the patient will be rigid and resistant to change, that one will have to deal with projective defenses in therapy, and that underlying homosexual problems may emerge. In the testing and analysis of predictions thus made in clinical practice lies the hope of establishing a solid core of psychotherapeutic theory, separated from ex post facto dogma

sometimes used to rationalize success or failure, and from a priori assumptions based more on belief than demonstrated by association with favorable outcome.

Formal experiments in which hypotheses are tested by means of prediction to criterion measures are commonplace in both clinical and general psychological research. But no systematic attempts have been made to use the countless informal predictions of daily clinical practice as the basis for the testing of clinical hypotheses. The reason for this omission is not far to seek, as the experience to be described in this monograph will demonstrate. Any attempt to convert an informal, implicit expectation into an explicit testable prediction leads to many practical and theoretical issues of scientific method, and to logical problems with which philosophers have struggled for centuries. Aristotle, Saint Thomas Aquinas, Bacon, J. S. Mill, and their long line of followers in more recent times, would not be surprised at the difficulties we have encountered in undertaking our apparently simple exercises in logic. We have stubbed our toes, like the strangers we are to philosophical issues per se, on nearly every rock their lifetimes were spent in trying to remove. For science, however, the urgent problem is not necessarily to resolve logical dilemmas, but rather to find justifiable philosophical positions, in the hope that they will aid discovery.

This monograph describes a method developed in the Psychotherapy Research Project of The Menninger Foundation for the transformation of clinical judgments into testable hypotheses. While our theoretical orientation is that of psychoanalysis, we believe that this method has sufficient generality to be applicable to predictions about psychotherapy made within any theoretical framework. Chapter 1 describes the role of prediction in psychological research and states our rationale. Chapter 2 outlines our design and the procedures we have adopted. It includes a description of the forms developed for the formal restatement of clinical predictions and for their subsequent verification. We also describe a technique for classifying and analyzing a population of predictions for one or more cases in terms of the factors assumed to be correlated with their success or failure. Chapter 3 gives an account of the philosophical and methodological vicissitudes that we encountered, and of the decisions that we made in the construction of our formal model for stating predictions in a form which parallels the familiar

classical experimental design (independent, dependent, intervening, and error variables). Chapter 4 is our working manual of instructions for the translation of informal discursive diagnostic and prognostic statements into formal, testable propositions. The methods described have been tried in our study of 42 intensively studied cases in long-term psychotherapy, and involve more than 2,000 individual predictions. Complete analysis of these data is still for the future; to date,[1] all 42 cases have been studied at the point of treatment termination, and 35 have arrived at the follow-up stage. The results of the Prediction Study on a single completed case are reported in Chapter 5. The final chapter, 6, reports the fate of these predictions and their associated assumptions. Before going further, however, a question more searching than it may appear calls for consideration: Why predict at all?

[1] 1965.

1

RATIONALE: PREDICTION IN SCIENCE AND PSYCHOLOGY

Psychiatric research relies heavily upon research patterns developed in medicine and in psychology. The value of research designs utilizing prediction to verify hypotheses in psychological science requires little emphasis. This fundamental method is well represented in the literature; studies by Kelly and Fiske (1950, 1951), Stern, Stein, and Bloom (1956), Holt and Luborsky (1958), Escalona and Heider (1959), and J. Benjamin (1959) are outstanding examples of applications in the clinical, personality, and child-development fields. Most studies using prediction as a primary method assume not only the high methodological status of prediction, but also that its nature may be taken for granted.[1] Predictions

[1] Within psychoanalysis proper, prediction has historically not had so high a status as either a tool or a goal. This is related to the core position of the *principle of overdetermination* in psychoanalytic psychology. As Rapaport says: "Psychoanalysis' need for this principle [of overdetermination] seems to be due partly to the multiplicity of the determiners of human behavior, and partly to the theory's characteristic lack of criteria for the independence and sufficiency of causes. The determiners of behavior in this theory are so defined that they apply to all behavior and thus their empirical referents must be present in any and all behavior. Since there is usually no single determiner which constantly assumes the dominant role in a given behavior, other determiners can hardly be neglected while a dominant determiner is explored. When favorable conditions make one determiner dominant, the investigator is tempted to conclude that he has confirmed a *predicted* functional relationship—as he indeed has. Regrettably, the attempt to repeat the observation or experiment in question often fails, because in the replication either the same behavior appears even though a different determiner has become dominant, or a different behavior appears even though the same determiner has remained dominant" (1959, p. 67; italics added). It then follows that "Clinical predictions are always fraught with the fact that all motivations have multiple, equivalent, alternative means and goals. Thus, such predictions usually cannot specify which of these equivalent alternatives are to be expected, and therefore, the results of experimental tests of predictions must first be interpreted before their bearing on the theory can be established" (p. 120). It is because of such considerations that Rapaport felt it logical that Freud had been led to "overemphasize postdiction and underemphasize prediction in building his theory" (p. 18).

are customarily made and tested without inquiry into the process or meaning of prediction itself.[2] In the language of science, as in popular speech, there are terms which, because they represent important concepts, tend to become overvalued, attracting to themselves clusters of not necessarily related conceptions. "Prediction" is in danger of becoming one of those slogan terms ("objectivity" and "control" are others [Sargent, 1956a, 1961]) which by their very inclusion in the title of a paper virtually guarantee respectable identification with science and sound method. Whenever such a situation develops, careful re-examination of the concept is in order.

In embarking upon another prediction study, it seemed important, therefore, to examine the concept of prediction itself, its role in science, and in social science in particular, and to make explicit our own purposes in adopting this approach. Prediction is a tool for validation or the "checking" activity of science (A. C. Benjamin, 1949). But proof is not the whole of science, nor is prediction its sole objective. In Allport's (1937) often quoted definition, science is "the effort to understand, predict, and control." Cantril et al. (1949) write:

> The aim of science is often defined as the attempt to increase the accuracy of our predictions. While the accuracy of predictions is clearly a most important criterion of progress in scientific formulation, emphasis upon prediction alone can easily obscure the more fundamental aim of science covered by the word *understanding*. . . . Many of those who equate science with prediction, or use a narrow working definition of operationism, are also those who will say they want nothing to do with the speculations of philosophy. And yet it is only by taking the philosopher's point of view, by bringing in freely all factors that might conceivably be involved in a single situation, that we can become aware of the boundary of our up-to-the-now determined scientific world. . . . The implicit equating of scientific inquiries and scientific method to a technique of investigation, leaves out an all important consideration: the problem of formulating a problem for scientific investigation [p. 463].

More recently Hanson (1958) has emphasized the difference between, and the equal importance of, the "checking" and "discover-

[2] An outstanding exception is the recent contribution of J. Benjamin (1959) in which theoretically based predictions, formulated and tested in a 15-year developmental study, are exhaustively scrutinized from a logical and theoretical standpoint. This study will be discussed at some length in Chapter 3, below.

ing" phases of science. In his presidential address to the British Association for the Advancement of Science, Sir George Thomson (1960) developed the same thesis: "Science is not merely the control but also the understanding of nature. Its two aspects must be held in equal honor."

This whole position that prediction is not the sole goal of science has been cogently developed by Scriven (1959) in two further arguments. First, prediction requires essentially only a correlation which is not by itself sufficient for an explanation.

> In explanation we are looking for a *cause,* an event that not only occurred earlier but stands *in a special relation* to the other event. Roughly speaking, the prediction requires only a correlation, the explanation more. This difference has as one consequence the possibility of making predictions from indicators other than causes—for example, predicting a storm from a sudden drop in the barometric pressure. Clearly we could not say that the drop in pressure in our house caused the storm: it merely presaged it. *So we can sometimes predict what we cannot explain*[3] [p. 480].

The second argument approaches the same issues from the opposite direction: we can often explain what we could nonetheless not have predicted.

> We can explain the unlikely outcomes of partially random processes, though we cannot predict them. We are not hard put to explain that a man's death was due to his being struck by an automobile, even when we could not have predicted the event. . . . Hence an event which cannot be predicted from a certain set of well-confirmed propositions can, if it occurs, be explained by appeal to them [pp. 479-480].

> It is not only true but obvious that animals which happen to be able to swim are better fitted for surviving a sudden and unprecedented inundation of their arid habitat, and in some such cases it is just this factor which explains their survival. Naturally we could have said in advance that *if* a flood occurred, they would be *likely* to survive; let us call this a hypothetical probability prediction. But hypothetical predictions do not have any value for actual prediction except in so far as the conditions mentioned in the hypothesis are predictable or experimentally producible: hence there will be cases where we can *explain why* certain animals and plants survived even when we could not have *predicted that* they would. And it is a feature of the irregular subjects

[3] Italics added.

> that, unlike classical atomic physics, the irregularity-producing factors lie outside their range of observation and are not predictable by reference to any factors within this range [p. 478].

Why then the sacrosanct position of prediction in psychological research? Emphasis upon prediction has come in part from achievements in psychometrics, in which, once a correlation between two tests has been established, it is possible to plot a regression equation by means of which the score on test A may be predicted from test B. It is also true in applied psychology that many of the problems referred by teachers, employers, psychiatrists, and others, involve predictions of one kind or another—success in school or on a job, likelihood of survival in military training, possibilities of breakdown, adaptation to a variety of situations, reactions and resistances to psychotherapy, and other developments, personal and interpersonal, which need to be anticipated in varied dealings with people. More basic, perhaps, is the besetting urgency to reach full scientific status which has driven the new science, psychology, in its methodological strivings. "Understanding" is a rather vague and suspect term unless defined as expressing that stage of science concerned with describing phenomena and establishing laws of covariation. Control, except in a few delimited areas, is a more remote goal. To predict, however, is a test of potency, and to pass this test is a nearly invulnerable defense against perhaps embarrassing questions about subjective factors in data collection, bias in description, and contamination in interpretation.

The problem is, of course, one of perspective and emphasis. Prediction as a technique in a scientific endeavor is indispensable: as an early step in defining and testing hypotheses, when a hunch is tried out to see if it works; as a check upon successively more precise approximations; and as a final step in the proof of a law. It is important, however, to be clear about the role and purpose of prediction in the particular stage of investigation which may have been reached. Along with predicting and checking, there must be sufficient flexibility of design to permit the emergence of new relationships, and new hypotheses about the nature of these relationships, regardless of the fate of the assumptions initially entertained. Haste to predict something and to *prove* something sometimes results in the omission of steps essential to generating creative hypotheses

leading to discovery. When means become ends, the best of methods may produce a sterile product. We may wonder, for example, how much would be known about the structure of the atom and the nature of nuclear energy if physicists had been as preoccupied as psychologists are with "methodology" and had started out with the intention to predict explosions.

For the purposes of our study we regard prediction as a tool in the service of hypothesis testing and refinement all along the way, rather than as only an instrument of verification of final hypotheses. Our interest, as stated in previous publications (Sargent, 1956a, b; Robbins and Wallerstein, 1959), is therefore not in a scoreboard of right and wrong predictions. Rather, we want to use the data of confirmation and refutation to check the prognostic usefulness of assumptions basic to the practice of psychotherapy, and to learn more about the conditions essential to correct treatment planning and correct forecasting of realizable treatment goals and outcomes.

We use the success or failure of predictions, thus conceived, as an avenue to the study of the predictive value of observations and of theoretical concepts. We seek not to validate the basic theoretical assumptions of psychoanalytic theory (which are the "givens" within which our endeavor is set [Robbins and Wallerstein, 1956]), but better to understand the changes in patients which occur in psychotherapy carried on within the framework of that theory. The nature of *what* changes in patients compared with one another is being approached in the project by methods designed for cross-patient comparisons (Sargent, 1956b; Luborsky and Sargent, 1956). For understanding the process of change—*how* a change has come about—in individual patients, the predictive technique is a highly promising tool for intensive longitudinal study, with the objective of discovering crucial differences between successful and unsuccessful predictions in terms of underlying assumptions and limiting conditions.

2

DESIGN FOR THE PREDICTION STUDY

The purpose of the Psychotherapy Research Project of The Menninger Foundation, of which the Prediction Study is one segment, is to investigate psychoanalytic psychotherapy as it naturally occurs in a clinical setting, utilizing data regularly available from the treatment of patients in long-term psychotherapy and psychoanalysis, together with certain additional data gathered for the research. The over-all design of the project may be described as three-dimensional:

1. The time dimension is defined by the longitudinal study of the patient-subjects, intensively evaluated at three points: at the onset of treatment, at treatment termination, and at a follow-up point at least two years later.

2. The breadth dimension comprises parallel studies of all the data available at each evaluation point—including cross-patient comparisons of change in defined *patient, treatment,* and *situational* variables; studies of the outcomes of predictions (being reported in this monograph); and independent and parallel psychological-test studies, including blind replications of the individual Prediction Study, and also additional parameters, such as special psychological-test methods devised for such purposes as the study of ego identity and object-relationship paradigms. Interpatient comparisons are made possible by the evaluation of each case with respect to the predefined patient, treatment, and situational variables. Intrapatient studies utilize predictions systematically made on the basis of these defined variables. Thus, both longitudinal studies of individual cases and statistical approaches to a population of predictions as such are possible.[1]

[1] These interlocking studies may be considered, in a sense, as incorporating the two aspects of scientific method and purpose touched upon in Chapter 1: *under-*

3. The depth dimension represents a hierarchical ordering and analysis of clinical data at various levels, ranging, in one direction, from full clinical description at one end of the scale to quantitative analysis at the other. Traversing the levels in another direction, the scale runs from the systematic appraisal of factors general enough to permit statistical treatment to highly individualized interpretive case analyses "in depth"[2] at the other. The hierarchy of values, in continua from detail to abstraction, or from general to unique, depends upon the orientation and objectives of the investigator. Which step in a staircase is first, and which last, depends upon what direction one wishes to go in. When the abstract emerges, details are lost; when the unique insight occurs, generalization is precluded by definition. Clinicians, by the nature of their aims and interests, value the individual; experimentalists, searching for laws to transcend the unique, traverse the reversible staircase in the direction of abstraction. The two sometimes bow rather coolly as they pass. In our project we have tried to provide for the coming together of the two approaches or, at least, for peaceful fellow traveling. Freud, as Rapaport (1959), Jones (1953-1957), and Holt (1965) note, was interested in the abstract laws transcending individuals, and toyed with ideas of quantification, but he lacked methods available to the 20th-century investigator for pursuing psychoanalytic research at this level.

As we have stated, our Prediction Study attempts an intensive longitudinal analysis of individual cases with respect to both course and outcome of treatment; but it also aims toward the study of predictions themselves, not merely in terms of their correctness, but in relation to the conditions under which they may be fulfilled and the assumptions which underlie them. Each patient in the Prediction Study is regarded as an experiment in himself, utilizing intrapatient comparisons of both a qualitative and quantitative nature. Thus,

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standing and *prediction*. In the interpatient descriptive studies of relevant variables and relationships between them, *understanding* is sought. In the longitudinal intra-individual *Prediction* Study, exploratory hypothesis finding, refining, and testing is undertaken.

[2] This term, borrowed from the methodology of *content analysis* widely used in communications research, has been gaining popularity both in the vernacular and in the vocabulary of social science. Radio stations refer to news commentaries "in depth"; clinical articles mention case studies "in depth." Quotation marks seem required, however, the term not yet having quite earned its admission to scientific discourse.

within the context of the total design, the Prediction Study may be conceived of as 42 replications of a single experiment. In other words, we utilize here what Mowrer (1953) has designated as an "O" type of design[3] in which the points of observation (initial, termination, follow-up) are the variables, the patients are the experimentally replicated conditions, and the predictions themselves are the population. From another point of view, each prediction, together with the steps for its verification, may be regarded as a miniature experiment in which patient characteristics and situational aspects become conditions, and, with treatment, may be regarded as independent variables, while the prediction itself defines (or "enters the design as") the criterion variable. Among the questions of interest in such a prediction study are: *What* can best be predicted, on the basis of *what assumptions,* from what kinds of data, in terms of what levels of inference, from what viewpoints, over what span of time, with what certainty, etc.?

Basic Data

Basic data for the Prediction Study, as for the research as a whole, consists of the documents that make up a patient's medical record at The Menninger Foundation. Such a record routinely includes an admission note and progress notes (if it is a hospitalized patient), correspondence, a psychological-test report, and a social history which summarizes the historical and observational material so as to describe the impact of life circumstances upon the patient, and his role in bringing them about and perpetuating them. Upon completion of the evaluation of a patient, the psychiatrist writes a case report which summarizes all the above material, along with the treatment recommendations that are made by the staff. This record is made available to the Psychotherapy Research Project, and constitutes Form A, first-stage data. If such data are a mixture of fact, observation, and inference, so also is the clinical process being investigated. It is on the basis of this Form A clinical data *alone* that the Initial Study Team makes its evaluation of the patient, and its predictions about the outcome of the treatment that has been prescribed. The research team does not interview the patient at this

[3] As differentiated from the more familiar R, Q, P, etc., designs in which persons, tests, traits, etc., may be variables.

point, nor does it have any hand in the formulation of the clinical treatment recommendations.

The additional data needed for reappraisal of the patient at the termination of treatment are gathered by members of the research group through interviews at that time with the patient, the therapist, the supervisor, the relatives or other key figures in the patient's life, and from repeat psychological testing using the same battery that was used initially. At follow-up (at least two years after the termination of treatment) patients return to Topeka, at the project's expense, in order to duplicate as nearly as possible the conditions of the termination study. In some instances (with the patient's permission), members of the research group have been sent to the home community to gather additional material from collateral sources. All of this comprises the Form A data at the three points in time.

Data Ordering

Each case is assessed at each point in time (initial, termination, and follow-up) with regard to three sets of coordinate variables (patient, life-situational, therapist-treatment) interacting to determine the course and outcome of treatment.

The *patient variables* (Wallerstein and Robbins, 1956) (conceptualized within the context of psychoanalytic theory) were selected and defined by the research group on the basis of experience as those most frequently used in the clinical appraisal of patients at The Menninger Foundation. Their explicit description comprises Form B. At the time of initial study, two members of the research group (senior clinicians) write a description of the status of each patient with respect to each of the variables defined in this form. This form is executed again at the times of termination and follow-up study, to demonstrate whatever changes have taken place in the patient variables consequent to treatment. Form S (*life-situational variables*) and Form T (*treatment* and *therapist variables*) have been correspondingly devised and are similarly executed (Sargent et al., 1958; Luborsky et al., 1958). Form S, like Form B, is written out at all three points in time; Form T, since it comprises the assessment of treatment and therapist variables, can, of course, be introduced only at the termination point, and then retrospectively revised

at the follow-up point. Forms B, S, and T, based on the primary data of Form A, are fundamental to all substudies in the project, and provide the preliminary ordering of data for a variety of subsequent uses, including interpretive studies of individual cases and quantitative comparative analyses of patient-situation-treatment profiles (based upon the assessments of each of these sets of variables at each point in time).

Beyond these assessments, the Prediction Study requires that the prognostic inferences of the clinicians who made the Initial Study be transformed into discrete predictions. This is done by means of Form C, a dynamic case synthesis and prognostic summary based upon both Form A (the initial clinical material) and Form B (the derived initial assessments of the patient variables). In Form C the research clinicians are required to commit to paper what usually remains in their heads; that is, to make explicit what is often implicit in the clinical judgments that lead to treatment planning and recommendation.

Form C is executed as follows: At Initial Study, two members of the research group, after the completion of Form B, collaborate in writing out a view of the case dynamics, attempting to predict systematically the problems, events, vicissitudes, and outcomes of treatment in the main areas in which change is expected according to psychoanalytic theory. Predictions are made on the basis of the method of treatment which the predictors anticipate will be used. In most instances the predictors know the method at least grossly: psychoanalysis or psychotherapy. But the spectrum of techniques employed in psychotherapy, and even sometimes in psychoanalysis, makes it necessary for the research team to specify its own anticipations and then predict from these. Major topics covered by the predictions are: treatment recommendations (i.e., the research team's opinion of the appropriateness or inappropriateness of the psychotherapeutic modality that has been prescribed, and of the circumstances in which it is to be carried out); nature of the problems expected to arise in the psychotherapy; anticipated changes in symptoms, impulse-defense configurations, and manifest behavior patterns; structural changes in the ego; and the acquisition of insight in its relation to changes in attitudes toward the self, others, things, and the illness. In the execution of this form, the clinical researchers are not asked to burden themselves with the problem

of how predictions may best be stated for subsequent verification. They are charged merely with the responsibility of stating their predictions as fully as they can in the areas indicated above. They are asked to include as much of their assumptions, reasoning, and associations as they can make explicit, and to state as clearly as they can the conditions under which they expect their predictions to hold. At this point, it is preferable to preserve and bring out as much of the clinical thinking as possible, so that no implications of the prediction are lost and, equally, none are forced.

Formalization and Verification

Although Form C incorporates the essentials of prediction, predictions so stated may be likened to ore in the rock. For use, the pure metal must be extracted and subjected to further processing. A prediction, for scientific purposes, must be made in a form which lends itself to confirmation or refutation. Furthermore, to analyze the predictions themselves in terms of conditions, observations, and the underlying theoretical assumptions, it is necessary to be clear about what kinds of changes are predictable and on what basis.

As a device for extracting predictive "ore" embedded in the discursive diagnostic and prognostic material of Form C, Form P (*P*rediction) was developed. Its purpose is to bring out the predictions themselves in their most unequivocal form, and to specify their sufficient and/or necessary conditions, and their bases in observation and theory. Each Form P statement conforms to a tripartite "if-then-because" model. Between this present tripartite prediction model and the first approximations made in our earliest attempt at formalization lie many methodological, logical, and philosophical problems, which are considered in Chapter 3. First, however, some further procedural matters need be summarized.

Some predictions can be checked by subsequent events. For example, to check predictions that the patient will break off treatment, will divorce her husband, commit suicide, or adopt a baby requires only a factual comparison with the actual happenings. But many predictions concern intrapsychic changes, such as increased tolerance for anxiety, structural change in the ego, reorganization of defenses. The only possible confirmation of such predictions will consist in agreement with later independent judgments. Further-

more, many of the predictions can be confirmed only by a variety of possible but unpredictable events. One method of verification would be to ask a different set of later judges to estimate the degree to which the prediction as stated has been upheld by the evidence in later material. The huge subjective factor involved in this procedure, however, and the many opportunities for bias, argue against such an approach. Instead, we move in fantasy to the termination and follow-up points, asking the question: What are some of the ways in which this predicted change would probably be manifested? Accordingly, for each case, an individualized list of statements has been drawn up which embodies the concrete manifestations of each of the predictions. The future judges can mark these true or false (or partly true, or no evidence, etc.). This is the Individualized Form E (*E*vidence).

Thus, for the confirmation of the predictions, Form P is supplemented by Form E, which converts individual predictive statements into one or more categorical statements that such and such describes the patient and/or his situation at some future time. The Initial Study judges mark each statement true or false as they anticipate that the later, independent judges will check it at termination or at follow-up in the light of the intervening developments. In other words, Form E is designed to meet the requirements for advance commitment to the evidence (factual or judgmental) to be later accepted as confirmatory of the prediction. Form E also has the advantage of bringing back to the judges who made the initial clinical predictions a restatement of these in a new form, affording a final opportunity to accept or reject the embodiment of the original prediction. In filling out Form E the Initial Study judges provide a set of "answers" which can then be correlated with the opinions (or information) of the later judges, much as the answers of students are compared with the instructor's key to an examination: subsequent judges "take the test," and thus agreement between predictions and outcome can be graded.

In order that later judges not be biased by direct knowledge of the predictions made, individualized Form E statements are presented sometimes in direct (positive), sometimes in reverse (negative) form. Statements are also included in Form E which *might well* be related to the dynamics of the case, but which are *not* predictions that actually were made. These tangential statements are intended

to help disguise further the original predictions so that judgments by clinicians on the basis of later material may be independent of suppositions regarding the initial predictions.[4]

The individualized statements derived from the predictions made by the Initial Study judges are then supplemented by a "core" form composed of prediction areas generally covered in all cases. Originally this core form was introduced because many of the same conditions are predicted for in almost every case or, at least, the same areas are covered. It seemed desirable, therefore, to state these in standard wording rather than to introduce individual variation. Since Form E statements, both the individual and the core sections, are given to the Initial Study judges to be keyed, the core form in effect introduces new predictions for each case which the Initial Study judges may not have explicitly made until confronted by the choices in Core Form E. For purposes of data analysis, the core form not only provides a basis for confirming predictions, but also adds a device for cross-patient comparisons.[5]

Each prediction has a great many aspects whose significance would be lost if it were treated simply as an independent statement whose sole value is in its subsequent confirmation or refutation. Obviously some predictions are far more crucial than others; a whole series of predictions can be dependent upon the fulfillment of a single key prediction. For instance, "If treated by psychoanalysis, this patient will thoroughly resolve his major unconscious conflicts" is a crucial prediction, which then becomes the contingency for a series of specific statements about how this conflict resolution will

[4] Termination judges often have the feeling that, since they share with the prediction judges a common theoretical orientation, a common professional training and experience, a common working together in a variety of clinical (extraresearch) contexts, and access to the same clinical data (Forms A and B) on which the predictions were based, they can readily figure out what the specific predictions made by the initial judges were. In instances where, after making their termination judgments, they have gone back to see what was actually predicted, they have been surprised at the discrepancies between their estimates and the actual predictions.

[5] An inherent weakness in the standardized language of the Core Form E was pointed out by John Benjamin, on a consultation visit, as follows: "However, necessarily each of these questions does not have the same meaning in regard to each patient, so that a particular question answered one way on one patient and answered the same way on another, may to the individual filling out the form still connote subtle differences that are obscured by the identity of language." Thus, mechanical checking can never supplant clinical judgment in assigning meaning and valence to concordances and discrepancies.

manifest itself: "If treated successfully by psychoanalysis, he will be able to assume a position of responsibility in his profession," ". . . he will give up his excessive reliance upon sedatives," etc. For purposes of comparison, the subject matter of predictions is also worth cross-classifying, so that access may be had to groups of predictions about the vicissitudes of transference, changes in symptoms, alterations in manifest behavior patterns, etc. Since each of some 2,000 individual predictions can be classified in half a dozen ways, and the same is true for their contingencies and underlying assumptions, a system of data cards has been devised to make these kinds of data manageable. These cards[6] are suitable for computing-machine methods for tabulating and correlating relations among the various categories of predictions. Each prediction is typed on such a card, along with its contingencies and its theoretical basis. The categories of analysis appear as punch holes around the margin.

In summary, the primary data of the Prediction Study are the routine clinical diagnoses and prognoses implicit in treatment planning by psychiatrists, psychologists, and social workers responsible for patients. For research purposes these data are carried to a further level of analysis and conceptualization according to variables of theoretical importance. Essential ingredients of informal and discursive predictions are then translated by independent research analysts into formal hypotheses and testable propositions by methods discussed further in the following chapter.

[6] The cards are McBee Keysort and were devised with the help of Mr. Richard Rugh of the Royal-McBee Company, Kansas City office.

3

MODELS FOR PREDICTION

In addition to the objective of developing an instrument for converting clinical predictions into testable hypotheses, a model was sought which would also lend itself to the analysis of predictions themselves in terms of conditions, observations, and theoretical assumptions most closely associated with correct prognosis. The aim, that is, was not only to use the predictive method to evaluate change but to learn more about what changes are predictable and on what basis. For the purpose of thus transforming the informal predictions of everyday clinical work into statements that can be confirmed or refuted in a way which bears upon the theoretical assumptions from which the predictions were derived, several available models, each having advantages and limitations, deserve careful consideration.

Most familiar is the "if-then" model for experimental research summarized by A. C. Benjamin (1949). All experimental prediction studies follow, at least by implication, the "if-then" form of the hypothetical proposition as A. C. Benjamin described it; the *ifs* represent variables manipulated or controlled by the experimenter according to a preconceived hypothesis; the *then* clauses stand for criterion variables to which predictions are made.

Concerning hypothetical propositions of this type, A. C. Benjamin (1949) wrote:

> Let us now turn to a consideration of the next phase of science—verification. This may be broken up into two subphases. The first involves making predictions on the basis of the assumed hypotheses. This is deductive in character; it begins not with the descriptive symbols, however, but with the hypotheses. The scientist simply asks himself what would have to be true in nature *if* his hypothesis were correct. Such predictions always have the *if* . . . *then* . . . form, where what follows the *if* is the hypothesis, and what follows the *then* is the antic-

> ipated observations, either experimental or nonexperimental. The second of the two phases involves the checking activity. The predicted consequences are compared with the actual facts as disclosed through observation; and the hypothesis is rendered more probable or rejected according as these agree or disagree [p. 196].

Clinical predictions stated thus as hypothetical propositions may be considered analogous to the traditional experimental model with contingencies as the independent experimental variables, predictions themselves as the dependent variables, and the theoretical and/or observational assumptive base of the statement as intervening variables and/or hypothetical constructs relating the two. Formal laboratory experiments are an obvious illustration of this model. It applies also to predictions based on pre-established correlations. Scores on intelligence tests, for example, have been shown to correlate with school grades. To check the correlation (i.e., test the hypothesis) between achievement and test score, the success of a pupil is predicted from his score on the test. In such a prediction, the condition (test score) is so clearly related to the prediction (achievement) by the construct "intelligence" that there is no need to spell out the intervening variables in the prediction itself.

This simplest and most commonly accepted "if-then" model was tried first in our own research construction, but quite early proved to be inadequate. The course from this first optimistic approximation to the final adoption of the tripartite "if-then-(/)"[1] model—supplemented by a system for classifying predictions along a number of relevant dimensions—involved a number of methodological, logical, and philosophical problems.

To begin with, in exploratory research in psychotherapy, empirical relationships and relations between hypothetical constructs and theory from which predictions derive are less codified and explicit than in the experimental laboratory. Anticipated conditions in psychotherapy research may be similar in form, but they rest upon a complex of theory, observation, preconscious intuition, and even pure hunch to such an extent that if the prediction is upheld, it is difficult to surmise what, if anything, the confirmation proves, unless the whole network of assumptions and conditions is made explicit in advance. The usefulness of the "if-then" model for con-

[1] The symbol (/) represents "on the grounds of" or, in more natural parlance, "because" or "since."

ceptualizing design in psychotherapy research, or in (developmental) research concerned with predictions as confirmations of theory via the observation of natural processes unimpeded and unaltered by intervention, has therefore been less evident. In studies of these kinds, attention has become focused upon the importance of searching explication of the assumptive basis of predictions. Studies of the consequences of intervention, as in psychotherapy (involving not only personality theory as such, but theory of treatment as well), must also seek to explicate conditions; controlled, semicontrolled, or adventitious. The need for such rigor of statement and such full explication of assumptions is driven home most effectively when verification is attempted.

In addition to the familiar hypothetical model which, as A. C. Benjamin described it, is the prototype of experimental science, two other available models for prediction, those offered by David Bakan and John Benjamin, have much to contribute to the problem of validating personality theory.[2] Both of these models have particular interest and value for us. They have in common the categorical and/or dispositional statement of predictions followed by an explication of "grounds" (Bakan) or theoretical assumptions (Benjamin) upon which the prediction is based. Bakan's approach, although primarily philosophical and methodological, has important clinical applications.[3] Bakan (1955) proposes a model for the confirmation of *general*-type propositions (true for every member of a group) in contrast to propositions about aggregates (referring to group averages). As Bakan points out, aggregates (or group tendencies) are confirmed by probability estimates based on measure of frequency (see also Chassan, 1953, 1956, 1957). General propositions, on the other hand, depend not upon measures of central tendency, but upon the successive support which each sub-

[2] The Psychotherapy Research Project has been fortunate in the availability and willingness for consultation with it of both John Benjamin on a continuing basis from the inception of the Prediction Study, and David Bakan more briefly and starting at a later stage of its development. If the approach finally evolved to the study of prediction differs in some respects from theirs in terms of different objectives, indebtedness to them for suggestions incorporated and for points of departure is nevertheless great.

[3] Bakan is primarily a theoretician concerned with methodology and philosophy of science, but his awareness of problems in clinical research is demonstrated in published articles (1953, 1954, 1956) and in personal communications as a consultant to our project.

sequent observation lends to previous observations. Thus when frequency estimates are used—as for aggregate propositions—the probability of a statement regarding a central tendency is enhanced by the inclusion of additional cases (i.e., the large "N"). When nonfrequency probability estimates are used—as for general propositions—each new case poses a threat of overthrow of the hypothesis.

The more commonly used frequency statistics that are appropriate to group data can seldom be adapted to general propositions of the kind sought, for example, in the interpretation of an individual case. There are, of course, clinical problems and aspects of data in psychotherapy research in which frequency measures are useful. More often, however, counting methods are of limited usefulness. J. Benjamin's study, for example, abounds in predictions which are tellingly confirmed by a single observation or a salient event. In contrast, success in the treatment of a patient with a hand-washing compulsion can hardly be adequately measured at the end of psychoanalytic treatment by the fact that he now washes his hands 12 times a day instead of 25.

Apropos the value and the usefulness of both general-type propositions *and* aggregate-type propositions in studying prediction in psychotherapy research, Bakan states (in a personal communication):

> Actually the same relationship holds between these two approaches as between deductive and inductive reasoning; that is, neither one is adequate by itself and both form a kind of cyclical interaction by which the process of scientific discovery and verification proceeds. The methodology for the establishment of general propositions is most appropriate at the discovery phase of research whereas verification must eventually be established by both frequency and nonfrequency probability methods.

J. Benjamin's (1959) summary of a 15-year developmental prediction study is particularly valuable for its extensive analysis of the ordinarily unexplicated aspects of prediction, and for the wealth of clinical example supplied. The stringency of its logic and the rigor of its quest for the assumptive source of predictions warrant the attention of all who are engaged in clinical prediction. Benjamin's strongly positivistic orientation focuses attention upon the careful identification of behavioral clues upon which predictions are based, and upon behaviors which can be predicted from em-

pirical observation, in the light of a theoretical understanding that ranges from preconscious intuition to fully explicable theoretical tenets. As a study of the inferential process conceived in terms of the traditional Behavior → Observation → Inference model, Benjamin's prediction study is unique in thoroughness and richness of example.

If Benjamin's approach has a weakness for our purposes, it is its failure to separate statements about *conditions* under which predictions are expected to hold from *assumptions* upon which the predictions are based. Such a blurring of the distinction between conditions and theory makes it difficult to distinguish between predictions which failed to be confirmed because of error in the theory, and those which failed because the assumed conditions never came about. For naturalistic studies, which proceed only from what is known and surmised at time A to predictions for time B, such lumping together of the "grounds" (as Bakan calls them) for predictions may not be too serious an oversimplification of method. But if an attempt is made to take intervening events into account (and these may vary all the way from such deliberate interventions as the use of a particular technique or mode of therapy, through events and circumstances that are important though not entirely controllable, to the interventions of fate, anticipated and allowed for, but entirely beyond the investigator's control), such factors need to be specified as a separate arm of the working prediction model. We are never able to state a prediction which does not depend on some specific limiting antecedent condition, such as that the patient will or will not receive treatment of a specific kind. Even Aristotle's famous syllogism requires a definition of the term "mortal." Shakespeare, not to mention Aristotle himself, is said to be "immortal" in spite of being a man. The prediction that tomorrow will be Wednesday depends upon the condition that today is Tuesday.

Identification of the limiting antecedent clause in any predictive statement is, therefore, important, even for a simple count of predictions confirmed or refuted at a later time. Predictions such as "*if* the patient is treated by psychoanalysis, *then* he will go through a period of acting out" cannot be tabulated, and, in fact, such a statement has no meaning unless psychoanalytic treatment is carried out; and this contingency must be checked at the time when predictions are counted as right or wrong. Such a statement as

"Panic attacks will subside as the patient experiences the therapist's support and acceptance" involves the limiting antecedent clause *"If* the therapist is perceived as a supporting figure, *then* the panic attacks will subside." If the therapist is not so perceived, regardless of what happens to the panic, the prediction as intended cannot be said to be verified or refuted.

To use the Benjamin research itself as a source of a specific example of a prediction followed through, in one instance it was predicted that a particular child would develop stuttering. This forecast was based upon certain experiences of the child understood in the context of the psychoanalytic theory of psychosexual development. A speech defect did appear, but as a lisp rather than as a stutter. The theoretical relationship between the lisping of the child and urethral problems expressed through the "S" sound and the toilet-training attitudes that pervaded the parent-child relationship are beautifully described by Benjamin. The fact that the prediction of stuttering failed, although the closely allied phenomenon of a lisp did appear, can be attributed not to a defect in the theory of psychosexual development, but to a gap in the predictor's knowledge of relevant aspects of the parent-child relationship which made it impossible to consider those special *conditions* of toilet training which played such a determining role. Hindsight, however, could confirm a brilliant foresight, and the face validity of a theory which led to such a close approximation is compelling.

J. Benjamin's (1959) treatise offers what is perhaps the most comprehensive and thoroughgoing analysis of the assumptive bases of predictions, at least those derived from psychoanalysis. His classification of predictions includes *varieties* of inference (intuitive, inductive, deductive), *bases* of inference (actuarial, in the sense of experientially demonstrated principles, correlational), *types* of prediction (negative and positive), and one type of condition for prediction ("true contingencies").[4] He provides sample illustrative material from a longitudinal developmental study conducted at the Child Research Council of the University of Colorado Medical Center.

Each of the above-discussed approaches contributes something to the problem of verifying clinical predictions, conceptualized as

[4] The parenthetical categories are Benjamin's; the general classifications in the italics have been added.

experiments. The "if-then" model of A. C. Benjamin (which was our own first model) implies, but does not specifically provide for, the explication of assumptive bases. It combines conditions and assumptions. It applies best at the stage in which theory is relatively mature, with the prediction so formulated that conditions can be controlled and their effects explored in a manner which provides a crucial test of the basic hypothesis. The Bakan and J. Benjamin models emphasize the need for full explication of what Bakan includes as the *grounds* (symbolized by /) of the prediction, but neither the Bakan nor the J. Benjamin model distinguishes explicitly between the observational and theoretical bases of predictions and the conditions under which they are expected to hold. Bakan lumps conditions and other factors together in his "grounds" clause. J. Benjamin includes conditions, observations, and theory in his "explication of assumptions." J. Benjamin's approach to prediction, although less systematic and quantitative than Bakan's, pushes much further the problem of the complexity of the observational and assumptive bases of prediction and the possible contaminating influences which play a part in verification.

The choice of the verbal model for the statement of predictions depends, of course, upon the purpose of a given research. The "if-then" model is essentially experimental; the "grounds," or more simply the "since-therefore," model is rational (hypothetico-deductive-inductive). Both are empirical in that they utilize observations that meet the criteria of communicability and repeatability.[5] J. Benjamin attempts to validate theory by testing the extent to which theoretical formulations based upon identification of significant determinants can lead to correct anticipation of future developments in a lawful natural process. Since primary interest here is in relationships between theory and predicted outcomes deductively or inductively derived, emphasis is upon explication of assumptions, so that the verbal form can be expressed in a "since-therefore" or (/) form.

Both J. Benjamin and Bakan are concerned with highly sophisticated predictions made for research purposes (rather than with the ordinary predictions of clinical practice as potential experiments in

[5] In our study clinical judgments meeting these criteria are regarded as observations, regardless of whether it is possible to distinguish so-called "objective" behavioral sources of inference from inference itself.

nature if translated into testable hypotheses) and with predictions which do not involve deliberate, theoretically based interventions. Perhaps for this reason, both overlook the desirability—in fact the necessity—for explicating as experimental conditions those factors which are more or less under control. By "control" we mean either deliberate intervention or the extracting of constants which can be anticipated or identified in postaudit analysis of naturally occurring phenomena—Klein's (1949) "experiments in nature." Such conditions must, for our purposes, be separated from those assumptions, based on observations and the theory of their meaning, by which conditions are related to the outcome of the prediction proper. The importance of specifying the conditions under which predictions are expected to hold has been amply demonstrated in various prediction studies (Kelly and Fiske, 1950, 1951; Stern, Stein, and Bloom, 1956; Holt and Luborsky, 1958). It has been shown that significance in results is directly related to specificity. The problem of validating criteria, in fact, virtually resolves itself when conditions are sufficiently definite. Since the conclusion, or prediction proper, states "what will have to be true in nature if the hypothesis is correct," as A. C. Benjamin puts it, the prediction states the criterion.

Unlike J. Benjamin's study, which most closely resembles our own in its clinical and psychoanalytic orientation, our problem is not simply to test predictions of future events from theoretical understanding of present observations, but to assess the effects of intervention in the form of psychotherapy. We seek to test those *clinical* predictions about treatment, made in advance of treatment, on which assignments to varying treatment modalities are based, and to use the predictive data for the better understanding of how empirical conditions, theoretical assumptions, and treatment consequences are specifically linked.

The tripartite model finally adopted for the purpose of transforming these clinical predictions into testable hypotheses combines the two foregoing approaches in a verbal statement of the "if-then-because" form, incorporating features derived from all three of the models from the literature discussed to this point. The rationale for the tripartite model is based upon the following considerations:

Every prediction, unless derived from a pre-established law for which it serves as an application or demonstration, is an experiment.

This fact holds from common-sense predictions in daily life to sophisticated, carefully wrought predictions formulated for research purposes, as in the J. Benjamin (1959) report. Clinical predictions are frequently based upon theories which, for the practitioner, have the import of a law. But to whatever extent we engage in research to refine, extend, revise, or even relinquish theoretical formulations, predictions made in clinical diagnosis and treatment are experimental in that outcomes are less than certain, and an attempt is being made to define variables, control conditions, and check upon results.

For exploring the impact of theory in action, and for extracting predictive statements embedded in clinical diagnosis, prognosis, and treatment, neither the hypothetical "if-then" nor the deductive "because-therefore" form is entirely adequate. Rather, for any prediction study concerned with results of specific treatment modalities and techniques, as well as with their bases in personality theory, the tripartite "if-then-(/)" model has both methodological and heuristic advantages. Separation of conditions from assumptions permits another dimension of analysis (the separation of anticipated conditions from theoretical and observational bases) by means of which the reasons for the success or failure of a prediction can be analyzed. Identification of conditions makes it possible to determine empirically whether predictions are borne out only in the anticipated context or under conditions not foreseen as related. Hence a more rigorous test is introduced.

Thus the tripartite model as we use it derives from both the hypothetical-experimental and the categorical-assumptive models, and combines these in a way which emphasizes the parallel between the components of verbal predictive statements and the prototype of the classic experimental design. These components include control of independent variables in order to test their relationship to dependent variables understood in terms of hypothetical constructs—constructs which generate our hypotheses and which are supported, if not "verified," by positive findings.

Chart 1 is the graphic statement of the tripartite model evolved for our research operations. It illustrates that various logical models are possible for clinical prediction; in this instance, the same prediction has been cast according to four possible models. In the first three models, elements are included under subsections which are

readily identified in the full form of the tripartite hypothetical-deductive model 4. Only model 4 subsumes *all* the others and provides for all the conditional, observational, and assumptive aspects of predictive statement.

Models 1, 2, and 3 either omit crucial aspects of the inductive-deductive process or lump them together. In model 1, for example, the "grounds" are omitted as such, but crop up in the antecedent or even in the prediction itself. In models 2 and 3 *conditions under which the prediction is expected to hold* are confused with the *bases of inference* (whether observational or theoretical), which obviously belong in a separate category. Model 1 does not sufficiently require the explication of assumptions; assumptions (hypothetical constructs and/or intervening variables) are regarded as part of the hypothetical antecedent, as indeed they are. But as we have seen, the introductory "if" may varyingly refer to the conditions of an intervention, to a theoretical assumption, or to an empirical observation. On the other hand, models 2 and 3 do not force specification of conditions. The limiting conditions under which a prediction is implied to hold are lumped together in an explication or a "grounds" clause along with assumptions. Model 4 applies to all predictions and compels these to be stated in a way which lends itself both to extraction of all dimensions of predictions from informal discussion material and to identification of the parts of the proposition to be specifically confirmed or refuted in data analysis.

Of course, some predictions, as written by the predictors in the project (the Initial Study group), fall *only* into the A columns (conditions) or the B columns (grounds), and the model does not demand that these be "improved" by the translator. However, if the basic tripartite model is kept in mind, more often than not the material for expanding the prediction to a full statement according to the tripartite model is found to be at hand. If the model is thought of as an instrument of research, the choice of the fourth form (the tripartite model) allows the most inclusive and the most explicit research statement.

The chart also illustrates in detail how the tripartite model reflects the essential components of classical experimental design. The model is a proposition composed of two terms, a hypothetical antecedent and a conclusion in which the prediction as such appears. The hypothetical antecedent, in turn, is divided into a conditional

CHART 1

MODELS FOR FORMAL STATEMENT OF PREDICTIONS

Formal logical models	I. Hypothetical antecedent (If)					II. Conclusion (Then)
	A. Conditions under which prediction is expected to hold [if-when]			B. Grounds on which prediction is based (since, because [/])		C. Prediction proper [then, therefore]
	1. Controllable contingencies; interventions [if, when]	2. True contingencies [if]	3. Other conditions [when]	1. Factual basis [/] (prior observations)	2. Hypothetical basis [/]	
scientific expts. →	(ind. var.)	(error var.)	(constants)	(empirical data)	(intervening var.)	(dependent var.)
Model 1 Hypothetical proposition (if-then)	If the patient enters Psa	and if the parents interfere	early in treatment *before transference* (B2) is established			*then* the patient will not be able to free herself from the parental tie and will disrupt treatment (B1 and 2)
Model 2 Categorical proposition (because-therefore)				because her immature dependence on parents who are *likely to interfere* (A2)	will not enable her to sustain the *frustrations of Psa* (A1)	The patient will disrupt treatment at the *first* (A3) sign of *parental interference* (A2)

Model 3 Probability statement (G on the grounds of x, h)				[/] *dependence and immaturity* (B1)	[/] *parental interference* (A2) and [/] *frustrating nature of Psa* (B2, A1)	The patient will disrupt treatment early in its course
Model 4 Tripartite hypothetic-deductive model for empirical scientific confirmation-refutation	If the patient enters Psa	and if the parents interfere	early in treatment	because of her immature dependence on parents	and because infantile persons are ill-equipped to meet Psa frustration or form useful transference	The patient will disrupt treatment

clause which states the conditions under which the prediction is expected to hold and an assumptive clause which specifies the observation and theory from which the prediction is derived. The introductory *if* and sometimes *when* refers both to the hypothetical nature of the entire antecedent clause (including both conditions and assumptions) and to the more specific conditions under which the prediction is expected to hold. As in experimental models, conditions are of two kinds, controlled and uncontrolled: deliberate interventions and manipulations of the therapist as against events which can be anticipated and allowed for, but not manipulated. Controlled variables, that which the therapist does, correspond to the controlled or independent variables in classic research design; conditions beyond control belong to uncontrolled or "error" variance. That is, even degrees of control are expressed within the *if* clause through including "error" in the form of true contingencies —events which cannot be controlled but may on occasion be anticipated [e.g., "if the father dies . . ." (when the father is known to be aged or seriously ill); "if the wife proceeds with her plan to divorce the patient . . ." (when there is a known likelihood of this); etc.].[6]

Part of the hypothetical antecedent, but separated from it by the flag word *because* or *since* or *in view of,* is the hypothesis itself in the (/) clause. These hypothetical constructs (or intervening variables in classical experimental design) are the assumptions which relate the conditions to their effects expressed in the prediction clause proper—which relate, that is, the independent to the dependent variables. The word *then,* or sometimes *therefore,* introduces the prediction proper or the conclusion, which corresponds finally to the dependent variable in experimentation.

[6] Strictly speaking, what J. Benjamin recognizes as "true contingencies" or "unpredictable events" (and considers as belonging to a special category of prediction) actually belong somewhere between "error" and "controlled" variance of classic experimental design. Contingencies—explicit or implicit—are involved in all predictions except those derived from established laws, which in psychotherapy, and in most of the problems of social science, are still few. J. Benjamin's classification refers to contingencies as a special category of "unpredictable events." Contingencies are not, however, *either* predictable *or* unpredictable, but represent a range of probabilities along a continuum from an almost unpredictable *if* (e.g., the prediction may be only a hunch, presumably based preconsciously on some combination of evidence) to a nearly certain *when* (e.g., predictions based on the emergence of transference manifestations rest upon a nearly certain condition in psychoanalytic therapies).

The word *evolved,* rather than *developed,* has been used advisedly throughout the foregoing description of the tripartite model. At first, as indicated, we adopted an "if-then" form for predictions, to be accompanied in each instance by a specification of assumptions on which they were based and a statement of the evidence to be necessary later for their confirmation or refutation. The statements of predetermined evidence were soon embodied in the separate evidence form (Form E; see Chapter 2). The requirement for a statement by the clinician predictors of assumptions for each prediction was dropped early in our work because it often involved repetitive restatement of theoretical "givens" already described in the preamble to the project (Robbins and Wallerstein, 1956). Also, the imposition of formal requirements upon the clinician judges who did Initial Studies ran contrary to a basic principle of our project—the principle of finding ways to use clinical judgment as it ordinarily functions, rather than taking it out of context, or tailoring it to laboratory requirements. We contented ourselves with requiring as full a statement as possible from the clinical judges of the "reasons" for their predictions, and included these in the hypothetical "if" or antecedent clause. As the formal statement of predictions became an established part of our procedure, the clinician judges became more conscious of the necessity to delineate clearly the assumptive bases of predictions, while the translation team became more adept at extracting from the material both the observations and the theoretical givens involved, preserving their essentials, and casting out equivocation. *Pari passu,* the tripartite model evolved into the form presented in Chart 1.

A variety of fruitful dividends have accrued from the use of the tripartite model. Though it is meant as a guide to the original statement of specific predictions deliberately framed for later testing, it can also serve as a kind of stencil which, if laid down upon the raw material of case discussion, highlights and classifies this material in a way that makes possible a formal restatement in terms which, without violating the spontaneity or the logic of the original thinking, render the embedded clinical predictions subject to explicit test.

The tripartite model has the further advantage of alerting us to various important, but not always recognized, aspects of predictive statements. For example, application of the model reveals that

conditions upon which predictions are based, stated as reservations or limits upon the prediction proper, are sometimes themselves predictions in that they are anticipations of future eventualities. Whether all such anticipations should be included as specific predictions to be confirmed or refuted depends upon their relevance to hypotheses. In any event, checking against subsequent evidence must include confirmation of the predictive conditions as well as of the prediction itself. From this it also follows that the prediction proper in one statement may be the condition for the subsequent prediction, as in the following sequence: "If the patient is treated by psychoanalysis, a major and early transference paradigm will be the clinging dependency which stems from the patient's intense oral longings . . ." followed by the prediction, "If the patient develops a clinging dependent relationship to the analyst, then the analyst's neutrality may be experienced as the same rejection felt from his father . . ."

This last statement represents a specific application of the characteristic interchangeability of independent, dependent, and intervening variables in psychoanalytic theory, so cogently stated and illustrated by Rapaport (1959) in his attempt to systematize the structure of psychoanalytic theory. For example, a statement about "structural change in the ego," which is included in one proposition as its assumptive base, may be the prediction proper in another, to be assessed by the agreement of subsequent clinical judgments. Likewise, the statement that a particular transference paradigm will unfold may appear as a prediction proper, or as the condition for a prediction related to the consequence of that transference manifestation.

In fact, there are instances when the premise (the *if*) that is to be explicated and the anticipation (the *then*) that is to be verified are entirely interchangeable. A rule of thumb is that the premise "if" refers to the factor whose effect we want to study (the independent variable), and that the anticipated "then" refers to its effect or outcome (the dependent variable). There are, however, instances in which the hypothesis refers not to the consequence of controlling a single variable, but to an interaction between variables, as in the following example: *"If* (despite the limiting difficulties) psychoanalysis succeeds, *then* this will result from the adequacy of the ego strength in this patient." The same statement

might be reformulated as follows: *"If* the ego strength of the patient is adequate, *then* the predicted changes will occur with psychoanalysis (despite the limiting difficulties)."

In either instance, an interaction between two independent (controlled) variables (psychoanalysis and amount of defined ego strength) is hypothesized as the condition for change. Which is included in the "if" clause as the condition or circumstance of primary interest depends upon whether we wish to test hypotheses about outcomes and concomitants of psychoanalysis as a method of treatment, or about outcomes and concomitants of such a patient variable as "ego strength." In either case, we postulate a result predicated upon an interaction between a treatment and a patient variable; the choice of the formulation depends upon a correct understanding of the intent of the Initial Study predictors, a choice which they are given an opportunity to accept or reject. Whichever formulation is chosen, a prediction of this kind is to a subsequent judgment, verifiable only by agreement of future judges.

For the over-all purposes of a research study which considers each clinical prediction as an "experiment in nature" and which seeks, therefore, to extract from informal clinical diagnosis and prognosis the essential elements of experiment and verification, the first task is the explication of all these basic components. The tripartite model facilitates a study of the sufficient and necessary conditions for correct prediction, and also the investigation of those assumptions which most frequently lead to correct prognosis, thus combining the hypothetical-experimental and the categorical-assumptive models (see Chart 1).

From the foregoing attempt to outline the rationale for the predictive model that has been developed from this study, we will now go on to illustrate the applications of the tripartite model to the actual research operations. In the next chapter we present our manual of principles and guidelines for the application of our model, together with clinical illustrations of each point. In Chapter 5, we present an illustrative case, studied at three points in time, including the formal predictions. In Chapter 6, we discuss the fate of the predictions for that case, including implications for the relevant assumptions.

4

MANUAL FOR THE FORMAL STATEMENT OF PREDICTIONS

Predictive Statements

DEFINITIONS AND GUIDELINES

1. A predictive statement is a hypothetical proposition asserting that in specific circumstances a particular event or change will come about (based upon inferences from theoretical and/or observational considerations).[1]

2. Predictive statements consist, therefore, of (I)[2] a hypothetical antecedent which makes explicit (A)[2] the conditions under which the prediction is expected to hold and (B) the grounds on which the inference is made, and (II) a conclusion which states the prediction proper (that is, the anticipated evidence which will confirm the hypothesis).

3. Conditional (A) and inferential (B) terms of the hypothetical antecedent (I) may be further subdivided; the former into *types* of conditions (controlled, semicontrolled, uncontrolled) and the latter into observational and theoretical bases (see below) of inference.

4. Predictions are of two kinds with reference to confirmation: predictions verifiable by subsequent *events,* and predictions to be confirmed by later *judgments.*

5. Predictive statements may follow each other in hierarchical

[1] Definitions, rules, and examples are numbered consecutively throughout. Arabic numerals designate guidelines, rules are identified by lower-case letters, and examples by parenthetical Arabic numerals.

[2] Parenthetical Roman numerals and capital letters refer to the sections of Chart 1, which delineates the formal model for the statement of predictions.

order; that is, the conclusion of one prediction may be the antecedent condition for another.

If the patient enters psychoanalysis, *then* the first problem will be oral dependency . . . (1)

If the patient develops a dependent relationship to the analyst, *then* the analyst's neutrality will be experienced like the rejection felt from his father . . .[3] (2)

6. In certain predictions, the forecast is concerned not with an outcome as such but with the reason or basis for a given change or lack of change. Of course, the aim in every prediction is to state the basis or assumption underlying our expectation, and obviously only certain predictions have the basis of the event as the core of the prediction. This special type of statement occurs when the predictors describe a development that is expected to occur *exclusively* on a particular basis. In such an instance they are not predicting a given event but rather are predicting that a given event will take place only as a consequence of a necessary cause. In most instances, that is, the prediction proper contains a statement of an expected event. Exceptions are made only when the predictor specifically describes a limiting, exclusive basis for an anticipated event, that is, where the statement has the form of "if this event occurs, then it will be on this basis, and *only* on this basis."

For example, if the Initial Study judges write:

Adaptive patterns will not change in this case unless psychoanalysis effects structural change in the ego (3)

it is obvious that the statement:

If the patient undergoes psychoanalysis, *then* structural change in the ego will come about (4)

does not capture the essence. The original statement is not actually concerned either with adaptive change or internal structural change

[3] For the sake of brevity, many of the examples cited in the manual will not be stated in complete form. They will often contain only the parts of the prediction necessary to illustrate a particular point. For a sample of full predictive statements see Chapter 5, which contains a complete set of predictions on a sample case.

as such, but with the intrapsychic *basis* of adaptive change. Hence, the correct statement would be:

If treatment succeeds in bringing about adaptive change, *then* this will come about *only* as a result of underlying ego reorganization or structural change . . . (5)

(If adaptive changes or internal structural changes as such are predicted, based on psychoanalysis or some other condition, these call for separate predictions.)

Or further examples:

If psychoanalysis allows her to develop a warmer, more feminine and affectionate relationship with her husband and to behave differently toward an infant of her own, *then* this will be only on the basis of the full working through of her conflicts over femininity, (/)[4] patients in psychoanalysis who suffer from symptoms which are rooted in lifelong deeply repressed intrapsychic conflict overcome these symptoms only on the basis of a full working through of the conflict. (6)

If the patient becomes pregnant, *then* this event will occur only on the basis of a full working through of her conflicts over femininity, (/) patients in psychoanalysis who suffer from symptoms which are rooted in lifelong deeply repressed intrapsychic conflict overcome these symptoms only on the basis of a full working through of the conflict. (7)

RULES

a. In writing formal predictive statements from discursive material, predictions are to be cast into a formal model in which the three basic elements of the hypothetical proposition (the conditional and inferential terms of the antecedent, and the conclusion clause) are introduced by *If* (*When*, or *In the event of*) to identify the conditions under which the prediction is expected to hold; by the symbol (/) (standing for *because, since, in view of*) to identify the grounds for the inference or the assumptive clause; and by *Then* (or occasionally *Therefore*) to set off the prediction proper.[5]

[4] (/) = "on the grounds of."

[5] The logic of this sequence is in accord with the structure of Chart 1. In actual usage, most predictive statements are written in the form *If . . . then . . . (/) . . .* because the language reads more familiarly, and therefore sounds more "correct" that way.

b. Only the major structural dimensions of predictive statements (see *a* above) are represented in the formal model. The subcategories of each term set forth below are to be handled by coding after predictions are formally written. Keeping in mind the subcategories is, however, an aid in recognizing and extracting the significant and relevant elements of predictions, conditions, and assumptive grounds embedded in the discursive material.

c. The first step in writing formal predictions is to identify, in the material, the *prediction proper* (II), after which the *conditions* (IA) and *grounds* (IB) are identified and explicated in the appropriate section of the model.

I. Hypothetical Antecedent

DEFINITIONS AND GUIDELINES

7. The hypothetical antecedent consists of two parts: a conditional clause, and an assumptive clause which states the grounds for the prediction. "If," whether stated or implied (as in instances utilizing such flag words as "after," "during," etc., for clarity in delimiting the condition), is the key word introducing the complete hypothesis from which the predicted conclusion is derived and hence implies the conditional nature of assumptions as well as of contingencies.

A. Conditional Clause

DEFINITIONS AND GUIDELINES

8. The material included in the conditional clause consists of those events that must occur in order for the prediction to be fulfilled. There are a number of specific conditions that surround a prediction, however, that it would be redundant for our purposes to state because they are implied in the general condition of the treatment method. To restate them for each prediction would be unduly cumbersome. Thus, "If psychoanalysis . . ." carries with it major implications that usually need not be specified in each predictive statement. For example: (1) The treatment will unfold in the usual manner in so far as transference and resistance manifestations are concerned; (2) the treatment will be conducted by the therapist with the requisite degree of skill. Thus, to state such

conditions as "if transference manifestations develop . . ." would be redundant because they specify developments in treatment which are normally expected in every psychotherapy. For all predictions it is assumed that transference manifestations will develop and adequate therapeutic skill will be exercised, unless indicated otherwise in the specific prediction.[6]

The conditional clause (IA) states the circumstances in which the prediction is expected to hold. These circumstances may be of several kinds:

9. Controlled and/or controllable conditions such as deliberate intervention, including the treatment method and/or specific techniques. (These are independent variables in the prediction "experiments.")

10. Other constants, or conditions that are semicontrolled, i.e., conditions that may be held constant by postaudit selection of cases and by pre-established criteria. These represent specific limits imposed on the predictions by such factors as the nature of the therapeutic relationship; attributes of the therapist and/or therapy (including skill, etc.) which are allowed for in making the prediction; and other developments in the treatment.

11. Uncontrolled or "situational" contingencies which may, however, be anticipated with varying degrees of probability. These include adventitious external events in the patient's life which will affect treatment (as obstacles, as facilitating factors, or with mixed effect), and certain developments, inadvertent impediments, and disruptive events within the treatment itself.

RULES

d. Conditions are to be introduced by *if, when, before, after, during, in the event that,* or other terms which place limitations upon the predicted outcome.

e. When there is a choice between including a condition in the prediction or in another part of the statement, conditions are to be separated from the prediction proper, and from the assumptions, wherever these indicate a limitation upon the prediction itself, and placed in the "if" clause.

[6] In some cases possible pitfalls in the handling of the case are foreseen by the predictors and in these instances certain predictions are made conditional upon the therapist's ability to deal adequately with these problems.

Decision about whether an outcome should be included as a prediction proper, or as a condition for prediction of the *basis* for the outcome, depends upon the context [see guideline 6, examples (3), (4), (5), (6), (7)].

CLASSIFICATION

Controlled Conditions (Deliberate Interventions)

A. Treatment Method
   1. Psychoanalysis
   2. Expressive psychotherapy
   3. Expressive-supportive psychotherapy
   4. Supportive psychotherapy
   5. Psychoanalysis shifting to expressive psychotherapy
   6. Psychoanalysis shifting to supportive psychotherapy
   7. Expressive psychotherapy shifting to supportive psychotherapy
   8. Any treatment
   9. Expressive psychotherapy shifting to psychoanalysis
   10. Supportive psychotherapy shifting to psychoanalysis
   11. Supportive psychotherapy shifting to expressive psychotherapy
   12. Any treatment except psychoanalysis

B. Specific Technical Interventions
   1. Instructions—general and specific
   2. Suggestion
   3. Abreaction
   4. Manipulation
   5. Clarification
   6. Interpretation
   7. Other

C. Adjunctive Treatment (hospital, day hospital, foster home, etc.)

Semicontrolled Conditions

A. Attributes of Therapist
   1. Skill and experience
   2. Need for supervision and how he uses supervision
   3. Personal style and attitudes
   4. Countertransference
   5. Age and sex

6. Climate of the therapy
7. Other

B. Therapeutic Relationship

C. Event or Development in Treatment
1. Positive
2. Negative
3. Neutral

D. Outcome
1. Success
2. Failure
3. Change

Uncontrolled Conditions—Contingencies

A. Situational "Assist"[7]

B. Situational Obstacle

C. Situational Event, Indeterminate

Examples

Conditional clause: *If, when*
Controlled Conditions (deliberate interventions)
Treatment method[8]

If the patient enters any form of treatment, then the central relationship in the patient's life will be that to her therapist . . . (8)

If classical psychoanalysis is the treatment, then grave difficulties will be encountered, particularly in the form of uncontrolled drinking . . . (9)

[7] Term devised by Kubie (Oberndorf, Greenacre, and Kubie, 1948) for a condition facilitating treatment.

[8] The treatment method actually enters into our tripartite model in a double way. A statement about the consequences of a predicted treatment method involves both the *contingency* that the patient will receive the recommended treatment (never established until the termination study) and the *assumption* that the indicated treatment has certain predictable consequences. The latter is taken for granted, and in our model we assign the treatment method to the category of controlled conditions. Predictions are ordinarily made with a particular treatment method in mind. However, the designation of a treatment as psychoanalysis, expressive psychotherapy, supportive psychotherapy, etc., is not made until the termination point has been reached. At that time, judges are asked to indicate on Form E the form of treatment which was actually undergone, not merely that which was originally recommended.

If the treatment is psychoanalysis, then the patient will develop the full complement of analytic insights including an understanding of the genetic roots of his unconscious conflicts . . . (10)

Specific technical intervention[9]

If the therapist points out the patient's pattern of provoking punishment, then she will experience this as a blow to her self-esteem, reacting with anger toward her therapist. (11)

If the denying defenses are analyzed and interpreted, then the patient will begin to experience a moderate depression . . . (12)

Adjunctive treatment[10]

If supportive-expressive psychotherapy, and *if the support of the structured hospital environment is not available concurrent with the formal psychotherapy, then* the patient will not be able to curb his self-destructive behavior, such as his drinking . . . (13)

If the hospital doctor plays an authority-bearing role, then the therapist will be perceived as a supportive figure . . . (14)

Semicontrolled conditions (held constant a posteriori)

Attributes of therapist (skill and experience, etc.)[11]

If the analyst is able to circumvent the dilemma posed by the patient's need for acceptance of his intellectual capacity without reinforcing his use of intellectualizing defenses, then a therapeutic alliance will develop . . . (15)

[9] The choice of techniques depends upon what situations develop as the treatment unfolds. However, at least some of these may be anticipated, according to the nature of the problems and the recommended treatment method.

[10] The category "adjunctive treatment" is used whenever adjunctive treatment bears *any* conditional relationship to the prediction no matter what the *direction* of the relationship. It is not necessary, for example, that the *use* of an adjunctive treatment be a condition; this category is also used in cases where the *absence* of an adjunctive treatment is a condition for the subsequent prediction.

[11] One of the important conditions of all predictions made is that the treatment itself will be carried out in the way envisaged, and with the requisite skill. In termination studies it is at times found that such conditions have not, for some reason, been met. It is important, therefore, to specify whether or not a prediction depends upon the ability of the analyst or therapist to carry out certain requisite techniques.

If the analyst is trapped into responding in kind to the patient's intellectualizing, then the analysis may bog down with pseudo insight as a defense against affective working through . . . (16)

Therapeutic relationship

If the patient finds considerable gratification from her childlike dependence upon the therapist, then much of the therapist's leverage will be based upon the anxiety-inducing effects of interpretation rather than gratification of her passive wishes . . . (17)

Event or development in treatment[12]

When affect is brought into consciousness . . . (20)

When positive transference feelings develop . . . (21)

When psychoanalysis is in its early phase and if affect is intensely aroused, then the initial ideational defense against affect will be followed by displacement and subsequent acting out without insight on the patient's part . . . (22)

If supportive-expressive psychotherapy, and if the treatment founders upon the patient's need to gain acceptance for his intellectualized pseudo insights . . . (23)

[12] This category generally consists of conditions which were the predictions proper of previous predictive statements (see definition 5).

If supportive-expressive psychotherapy, and *if altered techniques of adjustment and consequent behavioral changes do occur, then* he will need prolonged even if progressively less frequent contact with the therapist. (18)

The latter condition in this example is forecast in a prior statement and is now a *condition* for the present prediction, this situation being indicated by using the "developments within treatment" category. Sometimes, however, a development in treatment is a condition for a prediction but is not in itself a predicted event in a prior statement.

If psychoanalysis, and *if the patient becomes pregnant, then* this event will occur only on the basis of a full working through of her conflicts over femininity . . . (19)

Here the predictors had not made the forecast that the patient would become pregnant but only a prediction concerning the basis of that event, should it occur.

Also, all developments in treatment are classified according to their implications for the treatment process as a whole. When the development ultimately tends to move the treatment ahead, it is considered a positive event, even though the event is a resistance that temporarily slows down the treatment. When the development threatens the treatment with disruption or serious, undue delay, it is considered negative. When the development is not clearly either (when it could have either a positive or negative consequence), it is classified as neutral or indeterminate.

Outcome[13]

If supportive-expressive psychotherapy, and *if only limited goals are achieved (a "transference cure"), then* the patient will continue to make a dependent but somewhat more stable adjustment . . . (24)

If psychoanalysis, and *if the patient's major conflicts concerning femininity are resolved, then* the patient will become more affectionate toward her husband . . . (25)

If supportive-expressive psychotherapy, and *if the patient's conflict about helplessness associated with the threat of cancer gets resolved, then* his excessive dependence upon his wife will disappear . . . (26)

Uncontrolled Conditions (external contingencies)[14]

Situational "assist" (+)

If the patient's wife is able to tolerate the ups and downs of her husband's treatment, then the patient will find it unnecessary to terminate the treatment prematurely . . . (27)

If the patient's wife maintains her supporting attitude . . . (28)

[13] This category is confined to statements regarding the "over-all predictive outcome" (see below, II. The Prediction Proper). Each case has at least one statement in which an over-all statement is made concerning the degree of success or failure—generally in terms of degree of resolution of the core neurotic conflicts. A variety of other outcome statements then follow from, or specify manifestations of, the major outcome. The categories of "success" and "failure" are used to designate those treatments which are expected to yield results that are clearly positive or negative in terms of the optimal expected result for the given method. The category of "change" covers the broad area of partial success or partial failure.

[14] Situational events are considered external contingencies in so far as they concern events that are, at least superficially, external to the therapy situation. Some "external" events, like damage to his business by a flood, are independent of the patient's behavior. Other events, like the loss of a job, may be primarily determined by the patient's illness. It is no easy task to determine whether other events, such as a refusal of relatives to support treatment financially, are primarily "external," even when they may appear so on the surface. The patient plays a role as a provocative agent in many such occurrences. He himself may be the prime mover in provoking a divorce, in getting himself dismissed from his job, etc. Because of these obvious difficulties in determining which external events are the product of internal change, and which are relatively fortuitous happenings independent of changes in the patient, the patient's role must be bypassed for purposes of classification (although this has been heavily weighted in conceptualizing the situational variables for interpatient comparisons). Some such "external" events are obviously favorable, such as the support of treatment by key figures in the life situation, or unfavorable, such as the constant threat of interference with the patient's opportunity to continue in therapy. Other events are less easily classifiable as favorable or unfavorable, yet have significant impact upon the treatment

Situational obstacle (−)

If the father withdraws his support, during the early stage of treatment, then the patient is likely to terminate abruptly . . . (29)

If the father withdraws support after treatment is well under way, then the patient will support himself, if necessary, to continue treatment . . . (30)

If the patient loses his job, then he will become more anxious and develop a more dependent relationship to the therapist . . . (31)

Situational event, indeterminate (=)

If the patient comes into his inheritance . . . (32)

If the patient's father dies . . . (33)

No treatment[15]

If the patient fails to get treatment, then her character structure is likely to solidify further and her accessibility to later treatment will be diminished . . . (34)

If the patient does not get treatment, then his isolation and loneliness will tend to continue as before . . . (35)

B. Bases of Inference or "Grounds" Clause

DEFINITIONS AND GUIDELINES

12. The "grounds" clause states the source of inference embodied in the prediction and includes (1) theoretical bases from which

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course. Very few happenings are *obviously* beneficial or harmful, since a superficially favorable circumstance may actually become a detriment: a patient who comes into a large sum of money through no efforts of his own may conceivably decide to terminate treatment because of his newly won financial independence which, unrealistically, makes him feel that his life problems have been solved. The determination of its impact must usually be sought in the prediction proper which describes the expected effect upon the treatment. Whenever the "external contingency" category is used, the particular Form S variable involved should also be recorded. (See discussion of Situational Variables, p. 54.)

[15] Untreated or "control" cases cannot be compared with treated cases, as in laboratory research, for obvious clinical reasons. However, adventitious controls occasionally come about when patients who have been recommended for a given mode of therapy for some reason or other do not follow through. It is, therefore, desirable whenever appropriate to enter predictions as to outcomes and course of illness if no treatment at all is given. In those instances in which there is some known likelihood that the recommended treatment course will not be undertaken, predictions related to this contingency have been made.

hypotheses are drawn, as for example, theory of psychosexual development, transference theory, theory of defense, etc., and (2) the observations which suggest the prediction (see below).

13. The theoretical basis for predictions is derived mainly from psychoanalysis as a theory of personality and of therapy; much of the theoretical base we use is embodied in our conceptualization of the *treatment* variables, and of the nature of their interaction with the patient and situational variables.

14. The observational basis for predictions is derived from *patient* and *situational* variables, since only these are available as a basis for prediction at the time of Initial Study (when treatment has not yet started and treatment variables have not yet come into play). Observations are derived not only from behavioral and anamnestic data but from clinical inferences regarding intrapsychic attributes and processes.

RULES

f. The bases of inference are to be introduced by the symbol (/), which represents the words *because, since, on the grounds of,* etc., referring to observations combined with theory.

g. All relevant assumptions stated by the Prediction Study judges are to be included. In addition, the translator may explicate implied assumptions by paraphrasing the theory involved when this appears necessary (subject to approval, revision, and/or correction by the original predictors).

THEORY

Each assumption statement is written for the particular prediction to which it is assigned, but most of the theoretical statements are used for more than one prediction. In the course of writing out our various assumption statements it became clear that they could be organized into a hierarchically related system based upon two factors: generality and causality. We know that certain propositions can be stated at a very broad level of generality ("the arousal of anxiety leads to the mobilization of characteristic defenses"), while other statements have a more limited applicability and may be subsumed under the more general form ("patients who characteristically intellectualize rely more heavily upon this defense as anxiety is aroused in treatment"). At the very least, therefore, we may derive

a hierarchical system in terms of levels of generality, i.e., breadth of applicability.

The arrangement of statements so that each statement higher in the system answers the question "Why?" arising from the statement that follows it, makes it possible to indicate the successive causal factors involved in a given prediction. Let us take the prediction "*If* the patient is hospitalized throughout most of his psychotherapy, *then* the therapy will become increasingly expressive." This prediction was based largely upon the predictors' assessment of the weakness of the patient's ego, and their inference that hospital support would be needed to enable him to tolerate the stresses of an expressive psychotherapy. The succession of causal statements may be formulated as follows:

> When adequate ego strength is lacking for utilizing the expressive aspects of psychotherapy, a patient will derive sufficient support and control from the hospital structure to be treated expressively to some extent.

The above statement is subsumed under a more general statement regarding the expressive psychotherapies and ego strength which we might consider a "cause" or basis for the preceding proposition:

> Expressive psychotherapies can be carried on only under the conditions of a certain minimum of ego strength.

The causal factor explaining the need for good ego strength in order to benefit from the expressive psychotherapies is:

> The expressive uncovering aspects of psychotherapy, in so far as they encourage the expression of repressed impulses, affects, and ideas, place a strain upon the patient's defenses and arouse anxiety when contact is made with unacceptable affects.

The above series of statements outlines the successive causal linkages involved in the prediction concerning the patient's need for hospital support concomitant with an expressive psychotherapy. An advantage gained by constructing a hierarchical system is that the confirmation of predictions based upon assumptions at the more empirical levels automatically lends support to assumptions at the

more abstract, "causal" levels. Thus a single prediction serves as a test of a series of statements forming one of these causal chains.

A further characteristic of our statements is that they are cast in a general rather than aggregate form, using the distinction proposed by Bakan (1955). General propositions are stated in such a way that they should be true for every member of a group or class and have the form of a universal law. Aggregate propositions, on the other hand, are probability or actuarial statements about a given class. A general proposition would be that "patients with weak egos are unable to tolerate the expressive aspects of psychotherapy." An aggregate proposition would be that "80% of patients with weak egos are unable to deal expressively with unconscious conflicts in psychotherapy." In order to be validated, general propositions require support in each successive observation; they can be overthrown by one negative instance. The validity of the aggregate statement depends not upon the correctness of successive instances but rather upon the validity of the frequency estimate of the entire group. While both kinds of hypotheses and their respective methods of tests have their usefulness at certain stages of scientific inquiry, the general proposition or universal law is by far the more useful in a clinical science which is most interested in predictions about individuals. Unlike the insurance actuary or the political pollster, the clinician is interested in defining the class to which his patient belongs with enough precision and qualification so that his propositions will apply without exception to *every* member of that class and thus to the patient in question. Thus, the hypothetical aggregate proposition that "90% of all involutional patients show a remission of symptoms when treated by ECT" is useful to the clinician, but he is always faced with the problem of determining whether the patient for whom he is responsible at the moment belongs in the majority category or whether he is a member of the minority 10% who will not respond. Whenever he attempts to make such crucial decisions he is obliged to think in terms of propositions which apply to every individual in the class, i.e., general propositions. We therefore are casting *all* of our assumptions in a general form. Although our current clinical science is far from having a sizable number of valid general propositions, it is our conviction that progress in the direction of deriving such statements can best be achieved by means of testing those general propositions, however approximate, that are

currently in use. Our errors would then lead us to a refinement of our classes which would, hopefully, increase the accuracy of the propositions.

Examples of Grounds Clauses

(36) *If* supportive-expressive psychotherapy, and *if* the supportive structure of the hospital is not available, *then* the psychotherapy will become essentially supportive, (/) *expressive psychotherapies without adjunctive supports can be carried out only under the conditions of a certain minimum of ego strength.*

(37) *When* analytic treatment is still in its early phase, then the presenting symptom (anxiety, depression, and guilt following the attempt to adopt) will be relieved, (/) *patients whose symptoms are reactive to a relatively recent precipitating event and who develop a positive therapeutic relationship with the therapist in the early phase of treatment, give up these symptoms early in treatment.*

OBSERVATIONS

Observations on which predictions are based are classified according to whether they fall in the categories of the *patient* or *situational* variables which may contribute to a given inference or prediction. (The treatment variables are the "experimental conditions" introduced by the therapist and other persons in the therapeutic milieu and are not conceptualized as observational factors.)

Patient Variables

The classification scheme used to categorize the patient variables is the one used by the Initial Study group in their Form B and consists of 24 differentiated variables (Wallerstein and Robbins, 1956).[16] They are the crucial observational variables most used in making the predictions.

In attempting to select those patient variables that are pertinent to, or form the basis for, a given prediction, we are faced with problems of judging the relative significance to that prediction of each of the 24 assessed variables, since one could justifiably assert that in some way a majority, if not all, of the patient variables are causally

[16] Originally, Form B consisted of 28 variables but four were deleted after Form S, situational variables, was introduced. These four (presence of "neurotic life circumstances," adequacy of finances, attitudes of significant relatives, and physical health) are now subsumed under Form S.

related to each prediction, particularly since these variables are by no means completely independent of one another. Obviously some factors are more relevant than others, and one must exercise some degree of arbitrariness in setting one's limits upon the selection. The criterion must always be based upon one's judgment of the sufficiency of the variables chosen. (It is for this reason that at least two judges make these selections independently before a consensus is reached.) Our attempt is to skim the cream off the milk hoping that what is left in the container is not of crucial significance as determinants of our prediction.

In addition to the selection of variables, we are interested in the quantitative dimension of those variables that can be so described. A prediction based upon the patient's limited ego strength thus includes the patient variable "ego strength" and a quantitative estimate of that variable. These data are already available, since those variables that can be extrapolated along a quantitative dimension (18 of the 24 patient variables combined, however, into 12 more composite categories) are listed on a rank-order scale derived from the paired-comparisons procedure performed by the Initial Study judges on each case (Luborsky and Sargent, 1956).

The patient variables of "Form B: Assessment of Relevant Patient Variables" are:

I. 1. Sex and Age
II. Anxiety and Symptoms
    2. Anxiety
    3. Symptoms
    4. Somatization
    5. Depression and guilt feelings
    6. Alloplasticity
III. Nature of Conflicts
    7. Core neurotic problem
    8. Current life problem
IV. Ego Factors (and Defenses)
    9. Self-concept
    10. Patterning of defenses
    11. Anxiety tolerance
    12. Insight
    13. Externalization
    14. Ego strength

V. Capacities Factors
   15. Intelligence
   16. Psychological mindedness
   17. Constitutionally endowed aspects of ego strength
   18. Capacity for sublimation
VI. Motivational Factors
   19. Honesty
   20. Fee
   21. Extent of desired change
   22. Secondary gain
VII. Relationship Factors
   23. Quality of interpersonal relationships
   24. Transference paradigms

Examples

A complete set of examples for each patient variable will not be attempted. Rather, a representative list of predictions will be presented and the classifications will be indicated.

If the patient is treated by psychoanalysis, *then* she will be able to resolve her major conflicts with regard to the acceptance of femininity, (/) *patients with good ego strength and strong motivation to effect psychological change in themselves are able in expressive psychotherapies to resolve their intrapsychic conflicts with a concomitant remission of symptoms as well as characterological changes.* (38)

The patient variables considered essential as a basis for this prediction are (1) ego strength, (2) extent of desired change, (3) core neurotic problem. The last variable is considered essential since part of the good prognostic estimate concerning the resolution of the patient's conflict consisted in the conflict being rooted at least partly at a higher (phallic) psychosexual developmental level.

If psychoanalysis, *then* she will take a flight into health by allowing premature expression of her impulse to adopt a baby, (/) *patients in expressive psychotherapies who are extremely compliant and who rely upon denial and avoidance, when affects and anxieties associated with the emergence of underlying conflicts begin to arise, resort to premature behavioral change without the resolution of unconscious conflict.* (39)

The two essential variables for this prediction consist of: (1) patterning of defenses, and (2) core neurotic problem. The prediction is based upon both the intensity of the conflict and the defensive characteristics of the patient.[17]

If psychoanalysis, *then* the major conflict activated will be between the intense wish to be loved and cared for, and the concomitant feeling that people will soooner or later prove themselves unloving, untrustworthy, frustrating, and rejecting, (/) *the core conflicts and their associated defensive patterns give rise to the major transference paradigms.* (40)

Only one patient variable is used here: transference paradigms. The category of core neurotic problem is obviously related to this prediction but is less pointed and pertinent than the other choice.

If supportive-expressive psychotherapy, and *if* the support of the structured hospital environment is not available concurrent with the formal psychotherapy, *then* the whole complicated and difficult arena of conflicts will occur in the formal therapy situation alone, (/) *patients with limited ego strength and whose symptoms are alloplastic and destructive require that supportive psychotherapy be carried on with concomitant hospitalization for some period.* (41)

Here the pertinent patient variables consist of (1) anxiety tolerance, (2) ego strength, and (3) core neurotic problem. There is an obvious overlap between the first two variables; however, ego strength in general, and anxiety tolerance in particular, constitute essential causal factors of the prediction. The third essential variable refers to the intensity and multiplicity of the patient's conflicts.

When the transference phenomena ranging from compliance to rebelliousness unfold, *then* a major struggle will be against the perception of his own role in the perpetuation of his conflicts, (/) *patients whose self-esteem depends largely upon denial of psychological illness resist such treatment measures as would render such denial difficult to maintain, and (/) patients with limited ego strength and limited anxiety tolerance cannot tol-* (42)

[17] It is obvious that every prediction referring to a conflict will imply the operation of one or more defenses and vice versa. In this particular instance, both aspects were considered essential causal factors in making the prediction. There are other instances, however, where the emphasis is placed upon one of these variables and not the other, in which case only the one is used.

erate a clear picture of their ego operations, particularly early in treatment before a close positive relationship with the therapist has been established, without being overwhelmed by anxiety and/or guilt.

The patient variables consist of: (1) externalization, (2) psychological mindedness, and (3) ego strength. These three variables are the most pointed factors leading to the prediction inasmuch as they describe the patient's reluctance to examine his own role in his life difficulties. Although anxiety tolerance is obviously relevant, it is sufficiently implied by the other variables as not to require explicit listing.

If supportive-expressive psychotherapy, *then* the patient's homosexuality will completely disappear, (/) *patients whose behavior is motivated by rebellion against parental introjects eventually are able to curtail their rebellious, self-destructive behavior by means of a corrective emotional experience.* (43)

The patient variables consist of (1) core conflict, and (2) symptoms. The patient's symptom of homosexuality was seen as a rebellious act against parental figures who, hopefully, will be reintrojected in a more benign form, for which the model is the therapist.

Situational Variables

The situational variables constitute a second set of observational factors that contribute to the assumptive basis of our predictions. They are designated according to the schema presented in Table 1 which conceptualizes both the particular situational factor (background, interpersonal relations, marital-sexual relations, etc.) and its mode of operation (stress, support, etc.). The numbering in the table designates the particular cell representing the intersection or conjunction of these two facets.

Examples

Stress

If there is, later in the course of treatment, a recurrence of his carcinoma, *then* there will be only a temporary flare-up in the patient's presenting symptomatology, (/) *patients who successfully work through the conflicts triggered by a specific external stress and who then experience a repetition of the original stress* (44)

TABLE 1

THE SITUATIONAL VARIABLES OF
"FORM S: ASSESSMENT OF RELEVANT SITUATIONAL VARIABLES"

	Relevance	*Stress*	*Support*	*Conflict*	*Opportunity*	*Need congruence*	*Mutability*
1. Background							
a. Cultural		1	2	3	4	5	6
b. Religion, ethics, values		7	8	9	10	11	12
c. Educational		13	14	15	16	17	18
2. Interpersonal Relations							
a. Family (parental)		19	20	21	22	23	24
b. Family (marital)		25	26	27	28	29	30
c. Friends, co-workers, colleagues		31	32	33	34	35	36
3. Marital-sexual relations		37	38	39	40	41	42
4. Living situation							
a. Home arrangements		43	44	45	46	47	48
b. Financial		49	50	51	52	53	54
c. Responsibilities		55	56	57	58	59	60
5. Occupation							
a. Stability		61	62	63	64	65	66
b. Occupational demands		67	68	69	70	71	72
c. Compensation		73	74	75	76	77	78
6. Community and leisure time							
a. Recreation and avocation		79	80	81	82	83	84
b. Group participation		85	86	87	88	89	90
c. Civic and cultural activities		91	92	93	94	95	96
7. Physical factors							
a. Appearance and physique		97	98	99	100	101	102
b. Handicaps		103	104	105	106	107	108
c. Somatic illness		109	110	111	112	113	114

either late in treatment or after treatment is over, react at most with a temporary flare-up of the original symptoms.

If expressive psychotherapy begins while patient is in the hospital and removed from her stressful marital situation, *then* the patient's symptoms of rage reactions, crying spells, and tantrums will completely disappear, (/) *patients who undertake treatment away from their homes where they had hostile and destructive relationships experience a considerable reduction in the need for symptomatic expression, and (/) hospitalization helps to reduce a patient's level of anxiety by removing him from a conflict-triggering environment.* (45)

Support

If the treatment plan as outlined (discharge from the hospital, enrollment in the day hospital, and supportive-expressive psychotherapy being started on an outpatient basis), and *if* employed by someone other than his father, and *if* only limited goals are achieved, *then* the patient can make a reasonably efficient work adjustment as an automobile salesman, (/) *patients with limited ego strength manifested by poor impulse control and poor anxiety tolerance can check their most flagrant symptoms when the environment offers controls and sanctions appropriate alternative modes of impulse expression, and (/) the improvement of adaptive functioning resulting from supportive psychotherapy leads to better interpersonal relationships and a greater capacity to work productively.* (46)

If psychoanalysis with patient in the hospital or day hospital, *then* the analyst will be able to maintain his analytic position, *(/) when adequate ego strength is lacking for utilizing the expressive aspects of psychotherapy a patient will derive sufficient support and control from the hospital structure to be treated expressively to some extent, and (/) there is a reciprocal relationship between the intensity of wishes directed toward the therapist and the fulfillment of psychological needs in the patient's life outside the therapy.* (47)

If psychoanalysis and adjunctive supports (hospital, day hospital, etc.), *then* the patient will be able to delay turning to her parents when the frustrations of analysis become intense, (/) *to the extent that the adaptive capacities are enhanced, there is a proportional increase of anxiety tolerance, and (/) the availability of new sources of need gratification in the treatment situation enables patients gradually to relinquish older patterns of need fulfillment.* (48)

Conflict

If psychoanalysis, *then* the patient will from time to time transfer her psychological struggles from the arena of the therapeutic situation to that with her parents, (/) *to the extent that patients in expressive psychotherapies have good ego strength and high anxiety tolerance, they are able to confine their transference struggles to the therapeutic situation, and (/) patients whose infantile needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects, and (/) displacement of transference wishes to a patient's life outside the treatment is facilitated by pre-existing neurotic interactions.* (49)

If the patient returns to her home setting after a course of treatment in Topeka, *then* some of the old family dilemmas will be recreated, (/) *patients treated successfully while living away from home whose family relationships had been damaged by chronic hostility and destructiveness experience difficulty in creating a new adjustment to the home situation.* (50)

Opportunity

If psychoanalysis, and *if* the patient becomes pregnant, *then* this event will facilitate a working through of her conflicts concerning her own wishes for nurturance, (/) *changes in the patient's life situation which mobilize unconscious conflicts afford an opportunity for the working through of these conflicts.* (51)

If the patient is treated in Topeka while her family maintains their residence in Oklahoma, *then* she will reach insights into the neurotic interaction with her family which will not be relevant and accurate, (/) *patients whose symptoms involve their families in pathological interactions and who do not have sustained contact with them during treatment are unable to attain full and accurate insights into the nature of their neurotic interactions with their families.* (52)

Need-congruence

If the patient is able to make a life for herself in an artistic and cultural setting during treatment, *then* she will continue in this kind of life afterwards, (/) *to the extent that patients obtain gratification from their adaptive achievements, psychological changes are reinforced.* (53)

Mutability

If resolution of conflict is accomplished in psychotherapy, *then* relief of guilt feelings (about her neglected crippled child) will not be complete, (/) *to the extent that neurotic life circumstances are present there will be a proportional limitation of the amount of intrapsychic change that can be effected in expressive psychotherapies.* (54)

II. The Prediction Proper

DEFINITIONS AND GUIDELINES

15. The conclusion of a predictive statement asserts *what* event or change is expected to come about if the hypothesis holds. Events and changes may refer to intrapsychic developments, confirmable only by subsequent judgments, as well as to facts which can be verified by objective evidence from behavior and events (see guideline 4 above).

RULES

h. The prediction proper is to be preceded by the "flag" word *then.* Occasionally, in those instances in which no limiting condition is stated, but only the grounds, the conclusion may be introduced by *therefore,* following the deductive form "because . . . therefore."

Since the depression is largely reactive, *therefore it will disappear rapidly as the immediate situational stress recedes* . . . (55)

i. Each prediction should be embodied in a discrete statement; that is, only a *single* prediction should be included in each proposition. For example, the predictive statement that

Then the acting out will give way to depression . . . (56)

should usually be stated in two predictions, one for the disappearance of acting out, and one for the depression:

. . . *then* acting out will diminish . . . (57)

. . . *then* depression will become manifest . . . (58)

Frequently, however, two such predictions are so interdependent as to require representation in the same prediction. For such instances, see rule *j,* below.

j. The predictive clause should include *only* the prediction proper. Relevant conditions and grounds for inference should be stated in the antecedent clause, either in the *conditional* term or in the *grounds* term (which states the basis of inference).

For example, the predictive statement that

> *If* psychoanalysis, *then analysis of the denying defenses will result in the replacement of acting out by depression . . .* (59)

should rather be stated:

> *If* psychoanalysis, and *after* analysis of the denying defenses, *then the patient will become consciously depressed . . .* (60)

k. Conditions are often buried in the prediction proper and, whenever possible, should be extracted and moved to the conditional clause. In example 55, for instance, even the word "rapidly" actually refers to a condition which emerges if the proposition is restated as follows:

> *When* treatment is still in its early stage (="rapid"), *then depression will begin to lift,* (/) it is largely reactive and is responsive to the support of the treatment relationship. (61)

1. Predictive terms are to be stated unequivocally. The relative degree of certainty expressed in the original statement by "may," "might," etc., may be handled by ratings after predictions are formalized and coded.

CLASSIFICATION

Treatment Course

1. Transference
2. Resistance
3. Characteristics of treatment
4. Content of treatment
   a. Patient
   b. Therapist

Treatment Course or Outcome

1. Symptom change
2. Behavioral change
3. Situational and interpersonal interactions

} Adaptive Change

4. Insight
5. Impulse-defense configurations
6. Structural change in the ego

} Intrapsychic Change

Basis Predictions

Over-all Treatment Outcome

1. Failure
2. Part failure
3. Part success
4. Success
5. Other

Examples

Treatment Course (reaction, change, interaction in treatment)

Transference

When demands are not immediately met by the therapist, *then the patient will find it incomprehensible that her demands are not being fully satisfied on her schedule . . .* (62)

If psychoanalysis, *then the patient will expect her analyst to supply her immediately with the support and emotional sustenance that she demands . . .* (63)

If after discharge from the hospital, and *if* the analyst is the sole supporting therapeutic figure in her life, *then she may force him by her behavior (alcohol, barbiturates, etc.) to act as the authority, for example, to get her rehospitalized . . .* (64)

Resistance (other than transference)[18]

If psychoanalysis, *then the patient will use her neurotic difficulties as justification for her misbehaviors* (tantrums, demandingness, etc.) . . . (65)

[18] While most of the resistances to treatment consist of transference reactions, there is a group of responses which are not strictly encompassed by the concept of transference as such, though these, obviously, always have transference meanings. A large category here includes the "acting-out" phenomena which may be considered as avoidant reactions induced by treatment in which the patient dis-

Characteristics of treatment[19] (include shifts, length, difficulty, limits, etc.)

If the patient undergoes an initial period of supportive psychotherapy, *then it will become more expressive . . .* (66)

If classical psychoanalysis is the treatment, *then grave difficulties will be encountered . . .* (67)

If classical psychoanalysis is the treatment, *then the treatment period will be of unusually long duration . . .* (68)

If supportive-expressive psychotherapy, and *if* altered techniques of adjustment develop, *then he will need prolonged but progressively less frequent contacts with the therapist . . .* (69)

Content of Treatment[20] (themes, conflicts, genetic sequence)

Only *after* basic oral conflicts have been worked through in the analysis, *then phallic problems will become prominent . . .* (70)

If the narcissistic core of the patient's personality structure is worked through in psychoanalysis, *during* the final phase of the analytic work, *then the patient will become able to deal with phallic conflicts . . .* (71)

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charges anxiety in behavior, rather than bringing it into the treatment relationship. These responses are usually classified under the heading of *behavior* (see Adaptive Change, below) unless they seriously impede or threaten the treatment, in which case they are included here. Although it is difficult to make clear-cut distinctions in all cases between transference and resistance, resistance is here considered to include those aspects of treatment which cause undue delay or which threaten disruption. Examples are low level of motivation, failure to pay fees, missing appointments, dishonesty and withholding, etc.

[19] This category is used only when the prediction concerns general manifestations of the treatment or characteristics of the treatment situation as a whole. It does not apply to specific transference manifestations nor to specific contents of the therapy. Where vicissitudes in regard to a *particular* conflict are predicted, the "content" category should be used.

[20] The "content" category is used only when the prediction concerns specific treatment content that is not clearly expressed as a manifestation of transference or resistance. In most instances the major conflicts in treatment are classified under "transference" but occasionally the prediction is not formulated in transference terms, but rather as a general reference to sexual or aggressive conflicts. Many of these predictions refer to the sequence of problems to be dealt with. In addition to the content category as it applies to the patient's productions, there is a group of predictions describing anticipated behavior, techniques, strategies, etc., to be used by the therapist (as illustrated in example 74).

If psychoanalysis, and *during* its beginning phase, *then phallic problems* (penis envy, resentment of the feminine role, coquettishness, etc.) *will give way to oral problems* which will come to fore . . . (72)

If supportive-expressive psychotherapy, *then a prolonged conflict over dependency will not occur . . .* (73)

If treated by supportive-expressive psychotherapy, *then it will be necessary for the therapist to avoid either demanding behavior that is more mature than the patient is capable of demonstrating or developing with the patient a new dependency relationship to the therapist which will substitute for the achievement of any real independence or initiative . . .* (74)

Treatment Course or Outcome

Adaptive change[21]

Symptom change

If tension is constantly drained off via the analytic process, *then the fugue states will not reappear at any time during treatment . . .* (75)

[21] The term "adaptive" is used by Hartmann, Rapaport, Schafer, and others, to describe the person's relation to reality as distinguished from the defensive organization of inner impulse and conflict. Obviously symptoms and behavior *defend* against both internal and external dangers. Firm lines cannot be maintained between adaptive and intrapsychic, or between the three categories of symptoms, behavior, and situational interaction. The latter three categories represent those alterations in the person which have an external referent and which are usually capable of "objective" observation; that is, the change can be illustrated by events in the patient's life, by acts which he now carries out which were formerly impossible for him, etc., in contrast to changes which are inferred by the therapist or the clinical research team upon the basis of close observation of all aspects of the patient's current status. The *symptom* category ordinarily refers to those symptoms which brought the patient to treatment and/or to those aspects of both behavior and intrapsychic functioning which are ordinarily regarded as pathological. The *behavior* category refers most frequently to manifestations of characterological shifts. These include, for example, statements about acts which reflect passivity or assertiveness, inhibitedness or impulsiveness, obstinacy or overcompliance, etc. Another group of statements in the behavior category includes antisocial and self-destructive behaviors frequently found in certain character disorders. Compulsive behavior falls in a borderland between symptoms and behavior as such. By arbitrary decision the latter is classified as a symptom. The distinction between behavioral change and *situational change* also requires special attention. The behavioral category refers to general changes in behavior, whereas the situational category refers more specifically to interactions with important persons or situations in the individual's life. Behavioral change may refer, for example, to a change in the direction of more assertiveness in relation to people and situations in general, whereas situational change is described in statements specially referring to the patient's relationships with certain key figures in his environment, such as bosses, teachers, children, parents, etc.

. . . *then phobic symptoms will disappear* . . . (76)

Behavioral change

. . . *then the patient will substitute minor dishonesties like petty lying for gross embezzlements and stealing* . . . (77)

. . . *then the patient will appear less as if she has a "chip on her shoulder" and will be less demanding* . . . (78)

. . . *then the patient's addiction to drugs and alcohol will cease* . . . (79)

Situational and interpersonal interactions

If the patient undergoes expressive psychotherapy, *then she will learn gradually to get along better with her family without constant fighting and bickering though her feelings toward them will not change basically* . . . (80)

. . . *then the patient eventually will be able to establish a more affectionate relationship with her husband* . . . (81)

Intrapsychic change[22]

Insight

If the patient undergoes psychoanalysis, *then she will begin to see herself as a demanding person* . . . (82)

. . . *then insight will be achieved only at the level of awareness that psychological states are related to her bodily symptoms* . . . (83)

Impulse-defense configurations

If treatment is successful, *then this will be manifest in an increased capacity to interpose control over rage in the form of hesitation before action* . . . (84)

If treatment is successful, *then the patient will give up the introject of a harsh demanding father figure and replace it by an identification with a more accepting and less demanding authority figure (the therapist)* . . . (85)

[22] Definitions of the categories of intrapsychic change represented by the following three classifications will be found in Section IV, "Concepts," in our first progress report (Wallerstein and Robbins, 1956).

Structural change in the ego

. . . *then symptom remission will be based upon structural change in the ego* (see above guideline 6). (86)

If the treatment is expressive psychotherapy rather than psychoanalysis, *then significant behavioral change will take place but without accompanying resolution of sexual identity problems or structural change in the ego . . .* (87)

Basis Predictions[23]

If treatment is interrupted or prematurely terminated, *then this will result from acting out as a major problem . . .* (88)

If psychoanalysis achieves only limited goals, *then this limited success will stem from the patient's unreal object relationships . . .* (89)

If treatment runs into difficulties, *then these will stem not from lack of motivation and capacity to become aware of her difficulties, but will arise from the patient's established alloplastic behavior problems . . .* (90)

If amelioration of anxiety states results from the treatment, *then this will result from the supportive therapeutic relationship . . .* (91)

If the patient gets pregnant, *then this "somatic compliance" can only occur on the basis of underlying dynamic shifts in the ego . . .*[24] (92)

Over-all Treatment Outcome

Each of our cases contains some comprehensive statement of the over-all anticipated outcome which predicts the patient's probable response to the chosen treatment modality. This summary statement has a unique role in our listing of discrete predictive statements since

[23] As discussed in guideline 6 above, occasionally the occurrence of a change, or the coming about of some degree of success or failure, is the condition for a prediction concerning a later judgment regarding the basis or reason for the change. Predictions of this nature actually amount to checking back not upon a prediction as such, but upon the assumptions from which it derived. Or, to state this differently, it is confirmation by agreement upon an explanation of an observed change that is predicted. Predictions of this type are of special significance since changes may occur not only under different conditions, but for different reasons from those anticipated.

[24] Some of the basis predictions concern areas of classification already mentioned under course, adaptive change, or intrapsychic change. In such a case, the prediction should be classified under the other category as well as under "basis." In this instance "structural change" could be the other category.

it contains a set of assumptions which form the basis for a large number of the other predictions. It is therefore given this special designation in the classification system.

The over-all predictive outcome classification is divided into five categories of outcome: failure, partial failure, partial success, success, and other. The rankings are judged by the degree of anticipated change relative to the optimal development expected for a given modality. Where extensive structural change accompanied by the full complement of insights is predicted in a psychoanalytic case, it would be rated as "success"; where a lesser resolution of conflict or where only a "transference cure" is predicted for a psychoanalytic case, this would be down-rated accordingly.

In certain instances the over-all outcome statement may be noncommittal and may only describe the uncertainty and difficulties anticipated.

If psychoanalysis, *then the outcome of the analysis is not at all certain and will hinge upon whether or not the patient's denial can be worked through,* etc. . . . (93)

Since this statement cannot be included under any of the first four success-failure categories, it is placed in the fifth category of "other."

Other Classifications

As already indicated, many dimensions of predictive statements which will be important in the data analysis cannot be represented in the formal statement alone or in the major subdivisions of the *if, grounds,* or *prediction* clauses. Among these are such dimensions of predictions as hierarchy of dependency, distinguishing of "key" predictions, level of confidence, and the stage of treatment to which the prediction is applicable. These dimensions are additionally coded on the data-processing cards in accord with the following schema.

CLASSIFICATION OF FORMAL FACTORS

A. Dependent Predictions

Three kinds of dependent predictions are differentiated: those dependent upon (1) critical predictions, (2) over-all outcome predictions, and (3) stepwise predictions.

1. *Critical predictions.* These are statements appearing in some, but not all, cases which will determine a *major course* of the treatment and about which appreciable doubt is entertained by the Initial Study group.

> *If* psychoanalysis, *then the patient will be able to overcome his resistance to the idea that he is emotionally sick and unable to control his alcoholism . . .* (94)

> *If* psychoanalysis, *then the patient will be able to overcome his denial of his fears concerning his carcinoma . . .* (95)

Both of these predictions are "critical" or crucial in the sense that a whole set of divergent results hinges upon whether or not they eventuate.

2. *Over-all outcome predictions.* In every one of our 42 cases an over-all outcome prediction is made which constitutes the major expected result and which generates a whole set of subordinate outcome predictions. This dependent relationship is indicated as described above in the section "Conditional Clause: Outcome."

3. *Stepwise predictions.* As already indicated, some predictions constitute the *condition* for a following prediction, where the prior prediction is not of major importance, in the total case, as it is in the case of the critical and over-all outcome statements.

B. Key Predictions

Even preliminary analysis of predictions written for a given case suggests that some are more important than others and that predictions tend to cluster. In our design we anticipate that data analysis along the lines here suggested will identify not only the key predictions for individual cases but the nature and requirements for predictions which survive the tests of testability, significance, and surplus value. We have, however, undertaken an a priori selection of key predictions for each case in order to subject these to intensive study, and accordingly have set forth the following tentative criteria for identifying predictions falling in this category. The term "key" refers to the fact that certain predictions if confirmed or refuted may "lock" or "unlock" an entire area of related predictions; or, alternatively put, that they may be the keystone of certain predictions in a complex of forecasts based upon a single set of assumptions. For ex-

ample, a variety of predictions of transference phenomena and of later interpersonal relationship outcomes may be based upon the observation of oral character formation and its theoretical implications for treatment course and the achievement of treatment goals. If the observation and its theoretical base hold, derived interpretations will be sustained; otherwise, not one, but many predictions will fail. When it comes to the point of subjecting results to a rigorous standard of theoretical validation, only predictions which pass pre- and posttests of cruciality should be considered. Recognizing that the whole question of key predictions is one which the research upon which we are embarked is intended to help solve, we have tentatively set forth the following criteria for key predictions: centrality, pervasiveness, intensity, and exceptionality.

1. *Centrality or cogency.* This criterion refers to those predictions upon which a number of other predictions hinge. The content of the prediction usually pertains to some central development in the treatment which may make the difference between success or failure, or perhaps between only symptomatic change and more far-reaching structural change. Many of our cases contain such predictions of crucial events. In one case, for example, the possibility of the treatment becoming bogged down by an insoluble transference neurosis was entertained. In another case there was the important issue of whether the patient would be able to form a positive relationship with her therapist, a crucial development which would determine the outcome of a whole series of other predictions. Similarly, a summary statement regarding the over-all outcome of the case would be considered a key prediction. Thus, the statement that an effort at psychoanalysis will fail in a given case is not only a central prediction but from it a variety of other predictions stem. Another prediction of this type would be that pertaining to the likelihood of a premature disruption of treatment.

2. *Pervasiveness or frequency.* This criterion refers to the pervasiveness, in the illness or in the treatment, of the thing predicted. Certain predictions are made about major symptoms and behavioral problems which recur over and over again. Also included are those areas of therapeutic work which constitute the major problems of the treatment, the problems upon which most time is spent. Thus it was predicted for one case that the patient's difficulty in managing unacceptable hostile impulses would be the major problem to be

worked with in the treatment. Another aspect of pervasiveness in the treatment process concerns the major vehicle upon which the treatment is based. In some instances, as in psychoanalysis, the vehicle of treatment is conflict resolution by means of insight, but in other instances the treatment is expected to depend upon "corrective emotional experiences," or upon ego building through identification with the therapist. Also in this category would be predictions regarding the major underlying dynamic in a given problem. Thus it was predicted that a patient's problem with alternate anorexia and bulimia would be found to be related to unconscious distorted pregnancy fantasies.

3. *Intensity*. Certain symptoms or behaviors, either in or out of treatment, may not be frequent or pervasive but may be of great significance by virtue of their intensity when they do occur. Thus, a fugue state may have occurred only once in the history of the patient, but the striking nature of this symptom makes it a significant event in the patient's life and of special significance if predicted for the future. In the same way, one patient in our study was subject to infrequent but violent rages which produced considerable difficulty for him in his life.

4. *Exceptionality*. A certain number of predictions tend to reappear in a good number of our cases because of generic considerations that apply to psychotherapy regardless of the patient's personality. One consideration of this kind is the observation that patients often experience an exacerbation of symptoms during the termination phase of treatment. Another generalization regarding psychoanalysis which often emerges in our predictions is that the earlier pregenital fixations must be dealt with before one can fully analyze the patient's phallic problems effectively. Although such predictions, based as they are upon widely accepted generalizations concerning the theory of treatment, are of considerable interest to us, because of their generality we usually do not regard them as key predictions. In order to be considered a key prediction the statement should be differentiating to some extent and have some degree of exceptionality in terms of the specific configurations of the case in question.

The above criteria constitute the major considerations in selecting the key predictions from among the 50-odd predictive statements that are usually made for each case. Obviously, not all of them apply to each key prediction; in fact, some are mutually exclu-

sive. It has been our experience that approximately 20% of our statements qualify as key predictions by these criteria and these are set apart and given special consideration, for instance in terms of assigning "level of confidence" ratings to them. The final test of significance for the individual predictions will of course be determined empirically by the data analysis.

C. Level of Confidence

One of the significant variables in the predictive process is the level of confidence or degree of certainty which the predictor experiences with regard to his prognostications. In some instances the predictor is quite uncertain about the validity of his inferences for a variety of reasons, including factors of insufficient data, conflicting data, uncertainty of prior inferences, etc. In other instances, as in the case of clear-cut transference paradigms, the predictor is quite confident that he will be found correct. It has been observed in other studies, however, that level of confidence is frequently not correlated with the success or failure of the prediction. Hence we consider it important to make this variable explicit in our study. For practical reasons it was decided to apply our level of confidence ratings only to the key predictions. Each of our key predictions was rated by the initial predictors on a five-point scale as follows:

1. Even chance to occur
2. Slightly better than even chance to occur
3. A fair chance to occur
4. Moderately certain to occur
5. Practically certain to occur

In order to assure comparability among the ratings it was necessary to recast the key predictions into categorical statements. That is, where the predictions themselves already incorporated certain qualifying words like "may," "possibly," "likely," or "will have a tendency to," the statement was revised and placed in the form of an unqualified prediction.

D. Stage of Treatment

1. Categories of stage of treatment are checked for every prediction as follows:

1. Early
2. Middle

3. Late
4. Post
5. Early-middle
6. Middle-late
7. Throughout—occurring pervasively through a major portion of the treatment
8. Within—occurring episodically at any point of the treatment

2. Unless otherwise stated, transference predictions will generally be classified as occurring in the "middle-late" stage. This is based upon the fact that most of the transference predictions refer to major transference paradigms that usually do not unfold until the treatment has progressed beyond its initial stages. In psychoanalysis the "transference neurosis" does not fully develop until the treatment has moved beyond these initial stages.

In the process of further work on confirmation and other data analysis, we expect that still other dimensions, either with regard to content or formal characteristics, will suggest themselves and that appropriate classification methods will become apparent. For example, we may wish, by coding, to classify our predictions according to the nature of the supportive evidence (judgment or event), degree of explicitness, logical mode of reasoning (deductive, inductive, actuarial, etc.), locus in process as contrasted to outcome, etc. Predictions once stated according to the model may be classified in all these and other ways by coding. The examples given throughout this manual each illustrate a variety of categories other than those under which they are placed. The whole present classification scheme is seen only as the first approximation, derived largely from initial considerations, of our ultimate system. The guidelines, rules, and categories themselves are intended only as recommendations based upon experience to date. Ideally, they should serve not only for classification but as devices for extracting the essence of clinical prediction in a way calculated to preserve its most evident assumptions and prescribed limits, in a uniform fashion which lends itself to analysis of the data with reference to a variety of questions.

5

CASE ILLUSTRATION: PREDICTION STUDY FOR MRS. X

On the basis of all the data in the patient's clinical record prior to the beginning of psychotherapy, the two clinicians who formed the Initial Study Team wrote an assessment of the patient's difficulties and predicted her response to psychotherapy. Part A is an abbreviated version of their original case study. From this study, couched as it was in clinical language and hedged with the qualifications appropriate to that language, a Prediction Study Team extracted 31 predictive statements and transformed them into the if-then-because form required to render them testable.[1] These statements are listed in part B, Formal Predictions. One should bear in mind that the formalized predictions and their associated contingencies and assumptive bases are drawn from a much longer and more detailed text than is presented here. This fact accounts for those few predictions that will strike the reader as not clearly related to the case study that follows.

A. The Clinical Assessment and Predictions

THE PATIENT

The patient, a 41-year-old married woman and artist, was referred for psychiatric hospitalization because of panics, agitated depressive outbursts, and disturbed histrionic behavior bordering on the totally disorganized, which had risen to an intolerable crescendo during the several months of her return to live with her husband after a five-year separation.

[1] The formalized predictions were then reviewed by the Initial Study Team, to ensure that their original meaning had not been lost in this translation.

The patient was the only child of a successful physician father who left home to enter a hospital when she was only a year old, and died there of cancer two years later. The mother thereupon moved west, studied architecture, became assistant to a prominent architect, and finally herself the "best-known woman architect in the region." The patient was raised for the most part by the maternal grandmother. The mother's stern influence was felt in an inexorable pressure toward the child's education and the development of her artistic talent, which was in the professional range. The mother was a strict taskmaster, often demanding mastery of techniques within specified times, pressing attendance at all available art shows, and becoming angry and beating the child for failures to work adequately. In addition to art (and dancing) lessons, the mother provided private academic tutoring which permitted the precocious child to accomplish her elementary education with but a few hours of formal study daily. But in this push by the mother to rear the patient as a reincarnation of herself (the successful professional-intellectual-artistic woman), the child was isolated from other children and bereft of companions.

The indulgent grandmother tried to provide some leavening in this upbringing, and this led to many bitter quarrels between mother and grandmother. The grandmother was finally physically expelled from the home when the patient was 11.

Following her mother's death when she was 17, the patient moved east to continue higher studies in art. There she fell in with an arty, somewhat unconventional, sophisticated crowd which fascinated her. When she was 19 she met a brilliant young lawyer. Both the patient and he let themselves be pushed into a hasty marriage. Right after the wedding ceremony the patient darted from the reception room, secluded herself, and had to be reassured against her fright. She became pregnant several months later. She desired an abortion, and without even discussing the matter with her husband, she arranged to have a D and C. She never became pregnant again. The marriage soon deteriorated into quarrels and separations which led to the husband's obtaining a divorce.

The patient, now lonely, returned to live with her grandmother. While there she met her second husband. He was a rather passive, well-to-do business man, a good burgher who had none of the intellectual and artistic interests that she had cultivated. Again she

married after an extremely short courtship. This time on her honeymoon she suffered from vaginal bleeding, abdominal pains, and an intense fear of having contracted a venereal disease from a toilet seat. She consulted a number of physicians, and ended up having gynecological surgery in which her two tubes and one ovary were removed.

There followed eight years of rather contented living together. But during this time the patient suffered from fatigue and weakness, and lay abed for long periods. She consulted a wide array of physicians, mostly endocrinologists, and was on a variety of medications. She had two full-time servants and spent most of her time reading and listening to music. She confined her professional life to some art therapy and teaching. While she enjoyed going to concerts and parties, the husband was most interested in the home and garden, and would have liked to go hunting and fishing. Yet they got along tolerably well, despite their poor sexual adjustment; she was quite frigid.

After some eight years of marriage, when the patient was 31 she quite abruptly, and to the surprise of the husband, decided that she wanted to adopt a child. He went along with this decision to please her, and they secured a six-week-old boy from an agency. From the very start the patient was totally unwilling and unable to care for the child. The husband had to take the baby from the nurse's arms and carry him home. At the first soiled diaper the patient was astonished that such things occurred; the husband had to change it. The husband felt that his wife was afraid of the child and reconciled himself to taking over a large part of the nursing, rearing functions. The wife never did more than guiltily run through the motions of child raising. "I have no real wish for children. They bore me." The husband dated the subsequent deterioration of the marriage from this ill-starred adoption.

Shortly after the adoption the family moved to a large city, and from then on they led almost separate lives. The patient taught art and went out often to the theatre, concerts, and restaurants. Her symptoms (and her visits to doctors) continued. She abandoned any pretense at running the house. The husband attended to his business and also the housework, often including the cooking, and even the mending, washing, and ironing. He felt sadly that he had lost his wife to the attractions of the big city. Soon the patient

became involved with another man, a relationship originally promoted by the husband who brought this friend to the home as an intellectual companion who could share his wife's interests. This rapidly became a love affair in which the heretofore neurasthenic patient became again interested, vivacious, enthusiastic. The husband kept himself uninformed about this development.

After five years the husband determined to return to his home, town and family business. He turned down the patient's suggestion that he remain with her, staying home and running the house while she supported them by her art lessons, but he acquiesced in her decision to stay on in the large city, separated from him. He was always a rather passive man who found it hard to deny her anything. The patient supported herself rather well, living with her child and lover. Because of rising anxiety, however, she had about 10 months of psychotherapy, which she found very helpful, with a doctor who was very "proud" of her achievement. But gradually things seemed to go less well. Her art teaching became less successful financially; her interest in her lover soured and she became aware of how ashamed she really was of his unprepossessing appearance and his brusque manners which alienated people.

When the husband, after five years of separate living, insisted that she either return home or be divorced, she rejoined him. From this point her precipitous symptomatic decline set in. She was again repelled by her mundane husband and his habits; she found her sexual enjoyment poor by comparison with what she had had with her lover (her husband suffered from some degree of impotence). She was distressed that the son began to prefer the father, and when in her angers she threatened the son, he became openly fearful of her. She hated too her "home in a cornfield" and her role in it as mother and homemaker. Her aversion to the female role was quite extreme: she could not tolerate having to serve a man, even serving him food on a tray. She began to quarrel bitterly with husband and son.

Most of the day the patient now lay about in bed. Usually the blinds were drawn, her hands were over her face, or she wore dark glasses. This was punctuated by screaming and moaning and by agitated panicky attacks, with either intensely expressed fantasies that she would kill herself or that her husband would choke her, or wild tantrums. Her eating and sleeping patterns were grossly dis-

turbed. On one occasion there was a wild, panicky car flight through a crowded suburban area at 90 miles an hour. When she was stopped by the police, she collapsed, and appeared to be completely out of contact. She seemed mixed up between fact and fancy, had lost track of time and place. At this point she was referred for psychiatric hospitalization.

At initial examination, the patient was shaking and fearful, quite demoralized, and with an almost incoherent pressure of speech. She was dramatically expressive in her frightened query about whether there was any hope for her. She paced in an anguished way, constantly reiterating that she did not want to die. She brought up disconnected associations centering on her search for security and for reassurance of her husband's interest in taking care of her. This presenting picture changed dramatically in the course of the evaluation period. She calmed down, regained her control, and wondered if inpatient treatment was really necessary. She was now alternately hostile and seductive in more subtle ways. She was fond of quoting differing opinions from other doctors in pseudosophisticated and pedantic psychiatric jargon. At the same time she was vague and evasive about her feelings and, half willfully, colored her history to make a particular impression or avoid a particular disclosure. Through the whole period there were marked mood fluctuations, ranging from superficial cheerfulness to obvious depression, marked apprehensiveness, and occasional suspiciousness. Her affect was usually inappropriate to the particular context, and seemingly could be readily turned off in favor of another mood.

She looked older than her 41 years, wan, bony, flat-chested, and shrewish. Her quick, jerky movements, short hair, and careless, plain way of dressing made for a most unfeminine demeanor. This was given emphasis when she sprawled her leg up over the arm of the chair and stated, "Doctor, I am going to speak to you man to man."

She came for the initial evaluation accompanied by a woman friend. When she returned for the recommended hospitalization itself the husband came along. He was angry at having been left out of the original decision-making and suspicious that his only role would be to pay for the hospitalization which he saw as one of her whims, a way she found to spend his money. But he was convinced that she would not want to stay very long. This saddened him

because despite his bitterness he had not completely given up on the marriage and was willing to continue it if treatment held out any hope that it could be improved. He professed to having been very contented in the early years of the marriage and hoped that this contentment could be recaptured. He had put up with things subsequently in part because he would rather tolerate a bad situation in the interests of harmony than try to do anything drastic about it, in part because in a puzzling way, he still felt tied to the marriage. He would now defer any decision about divorce pending the treatment outcome, though after all this disturbance he was not very hopeful.

ASSESSMENT OF RELEVANT PATIENT VARIABLES

The patient's chief dilemma was her intense struggle against femininity. Physically she was gaunt and graceless and unfeminine; she gave "technical breasts" as a psychological-test response. She was repelled by every maternal or feminine activity and in the sexual sphere did not seem to enjoy any genuine tender feelings toward men. The height of the psychological turnabout was her suggestion to her husband that he stay home and tend house while she earned their living. At the same time, buried in her somewhere were the impulses that had led her to marry twice and to adopt a child, and she had never assumed an independent asexual or frankly homosexual role in life.

Her symptoms were severe and wildly fluctuating: periods of inertia in which she shut out the world alternated with hostile outbursts, black depressions, and disorganizing panics. When her anxious tension mounted unbearably she moaned and screamed and lashed out. Eating and sleeping disturbances were now chronic. Actually, almost her total life since the first marriage could be considered symptomatic—the marriage relationships, the love affair, her somatic disturbances, the use to which she put her art, her relationship with the adopted son, etc. It was only the husband's inordinate tolerance of wide extremes of disturbed and hurtful behavior that had kept her functioning in the world as long as she had. Somatization was chronic and intense, from the castrating gynecological surgery that she got herself into on her honeymoon to the neurasthenic and hypochondriacal disturbances in all the years since, that had kept doctors in constant attendance upon her.

The one symptom that was surprisingly absent was conscious guilt. The depression, with an intense suicidal preoccupation, was severe, yet this seemed linked not to guilt, but solely to the hopelessness that she would ever receive the narcissistic supplies to which she felt entitled. Unconscious guilt, on the other hand, seemed ubiquitous in the whole self-destructive, masochistic bent of her life (of which the gynecological surgery while on her honeymoon was a most blatant example). All of her symptoms, at times together and at times in alternation, were both intensely autoplastic *and* intensely alloplastic.

The core conflicts in this patient have been stated: her complete inability to make a positive feminine identification, deriving from the original hostile identification with the cruelly driving, masculine mother. The patient went through only the minimal motions of being a wife and mother and received few feminine or maternal gratifications from these roles. Her marriage provided only a facade of normal living and the gratification of economic dependent needs. In addition to the phallic-sexual and gender-identity problems, at other developmental levels the patient was involved in an intense sadomasochistic interaction with a willing-victim husband, and, even more regressively, in a sense of severe oral frustration and deprivation with consequent damaged narcissism, inability to give, and proneness to deep, hopeless depressions. Her narcissistic wish was to be nurtured and pampered, admired for her intelligence and talent. She was averse to mature responsibility and employed a variety of infantile techniques to feed her strong dependency strivings. With the patient's recent forced return to her husband, which entailed more demands on her and fewer opportunities to lead the kind of life she wanted—that is, where she would be maximally frustrated at both the phallic-genital and the oral-dependent levels of functioning—the whole flagrant illness erupted.

The patient's self-concept was that of an intelligent, sophisticated, and superior person, a talented artist, held back by her marriage and the pressures of motherhood and domesticity with which she could rationalize every failure in any aspect of her life. She was at the same time an arty Bohemian whose life style permitted rather flagrant deviation from conventional, reality-attuned judgment and behavior.

Her defensive structure was fluidly organized. Somatizing, intel-

lectualizing (more literally, "psychologizing"), acting out, attacking and depreciating, or a busy turn to her art were all ineffective ways of coping with her impulse-ridden state in which primitive fantasies or labile, histrionic affects were readily triggered by any minimally frustrating outer stimulus. At such times there were panics, agitated depressions, confused and depersonalized states. The concomitant perceptual fluidity, feelings of unreality, and arbitrary thinking bespoke the basic ego weakness. In these states of temporary psychotic disorganization, suicide was a distinct hazard. Her excited states were mostly defenses against such morbidly severe depression. What had kept her ego afloat at all had been the willingness of her environment to tolerate her expression of impulses and affects.

With everything thus exploding in the patient's affect storms and acting out, anxiety tolerance was of course almost nonexistent. Externalization was marked: she was highly critical of her husband, of her lover, and of every environmental pressure. She always tried to alter her environment rather than seeing any need for change in herself.

The patient's insight was minimal. She was of course aware of her extreme discomfort and what a mess her life was, but she was so self-referent that, for example, she had no awareness of (or guilt about) what she had done to her husband and her child. Her intelligence (IQ = 130) was superior, and during less troubled periods could be put to effective use. Her artistic talent represented a high capacity for sublimation, and it too could at times be used in the service of effective adaptation. Her psychological mindedness was slight, perhaps largely as a defense against even more depression and intolerable anxiety.

How honest the patient could be and how capable she was of facing herself without being overwhelmed by anxiety and guilt was an open question. The lack of guilt feelings served defensively against an even more severe depression; it also probably reflected a superego defect—the patient could maltreat the people closest to her without any apparent interest in the consequences. She also quite cavalierly misquoted the examiner and other physicians. In regard to fee, she at first saw her treatment as a way to force her husband's care for her and to impress upon him the seriousness of her illness. She later came around to agreeing to divide the costs

of her hospitalization and treatment equally between his income and her inheritance.

The change the patient sought was the relief of her symptomatic distress, the rages, panics, and depressions. The means would be through finding unlimited narcissistic supplies in the treatment. She asked for psychoanalysis, expecting that this would ensure a sophisticated and tolerant appreciation of her as a superior, intelligent, and talented person, entitled to all fulfillments. Secondary gain was high throughout the patient's illness. She had never had to face the actual consequences of her behavior. It was when the return to live with her husband sharply cut her secondary gains that the acute, severe illness erupted.

The patient's interpersonal relationships were uniformly hostile, depreciating, sadomasochistic, unloving, demanding. In her frigidity and frozen hostility she gave nothing and demanded everything. In the transference the therapist would be seen as the provider of inexhaustible gratifications. He must be strong and would be tested unmercifully to reassure her of his invincibility. Her pattern had been to castrate the masculine adversary; underneath was perhaps the search for one who would not permit it. In the inevitable transference battles the patient could alternately identify with the envied strong man, or torment him with her hostile testing, or passively submit as the dependent small child.

The patient was not caught in any sort of "neurotic life circumstance." Rather, her whole environment had been successfully bent to her neurosis by her acting out and the connivance of her objects. Only at this late date was the passive husband beginning to stir rebelliously. He implied that if his wife were to disrupt her treatment he would be through with her. The family finances were adequate to the treatment needs, provided only that the necessary period of hospitalization was not too long. Her somatic health seemed good despite the long history of medical treatment for neurasthenic and hypochondriacal complaints.

ASSESSMENT OF RELEVANT SITUATIONAL VARIABLES

There was little gratification in the patient's current life situation. The major relevant areas in her life were her deteriorated relationship with her husband, and her role and responsibilities as a mother and homemaker for which she felt emotionally unsuited and ill-

equipped. Her central neurotic conflict was her total inability to establish a positive and mature feminine identification. The largest environmental instigator of this conflict was the fact of motherhood. Before the adoption she had been at least managing tolerably; but from the very beginning the problems of motherhood were beyond her capacity or will. From this point her disturbed state ensued, and with it the decline of the anyway never very good relationship with her husband. The open rebellion against marriage, motherhood, and family responsibility grew apace, and with it developed her very different life in a large urban center with the arts, the intellectual and cultural circles, and her lover. When made to return to her husband, she could no longer tolerate the life she had once accepted. Yet her total environment, though to her thoroughly conflict triggering, was to only a small degree objectively stressful (a husband who—defensively—fell asleep nightly after dinner).

Supports for her life adjustment abounded in the large city with its varied cultural, intellectual, and social opportunities. And in some binding, sadomasochistically interacting way, the fact of her marriage somehow had a stabilizing effect upon her—at least when pushed to a decision, she abandoned her lover to return to her husband. Opportunities for greater happiness and a more productive life likewise abounded. She was educated, talented, cultured. She had money, social position, and a devoted husband. Unfortunately for her, these things represented to her conflicting directions that could not be integrated into a harmonious adjustment. What she was most obligated to and felt forced to return to (her husband, home, and family) she felt as most need-inappropriate; what she valued and enjoyed was the freer life of the arts and the intellect that she had felt forced to leave.

Yet none of this was immutable. All her options were available to her, depending on the extent and direction of conflict resolutions attained.

HOSPITAL TREATMENT PRIOR TO PSYCHOTHERAPY

Upon admission to the hospital the patient was suffering from major dissociative reactions, leading at their height to transient disorganizations of psychotic intensity, and at all times characterized by marked agitation, depression, and histrionic behavior. In

order to help enhance her controls and make her more comfortable as rapidly as possible, she was subjected to a firm, restrictive hospital regime with an active work schedule, rigorous attention to her eating and sleeping, strong efforts to minimize her somatizing and to wean her from medication, and cold wet packs as needed. The work schedule at first consisted of a variety of rather menial and monotonous tasks, and was subsequently broadened into more individually chosen and narcissistically gratifying projects, but with an emphasis on encouraging her to do things for others and to help others. It was hoped that her desires to dominate could in this way be channeled into constructive aid to others. Alertness to the suicidal potential was constantly maintained.

Despite this regimen, the depression became both deeper and more fixed. The patient became withdrawn and less communicative, though her behavior was not bizarre. She did begin to insist upon her *right* to leave the hospital and commit suicide. At this point a course of electroshock therapy (20 electroconvulsive and 10 nonconvulsive treatments) was carried out, after which the depression lifted and effective contact seemed restored. Concomitantly the patient became more difficult, angry, and openly complaining. In this context it was recommended that she start in supportive-expressive psychotherapy, the explicitly supportive features to be carried mainly by the hospitalization and the hospital doctor.

PROGNOSTICATION

The Initial Study Team found itself essentially in agreement with the diagnostic appraisal and treatment recommendation made by those who had clinical responsibility for the case.[2] The Initial Study Team expected the psychotherapy to be quite long, at least three to four years, with a rather prolonged (up to a year) initial concomitant hospitalization and only then a gradual transition through day hospital and foster-care home to outpatient status.

Within the psychotherapy it was felt that the patient would be able to look at the impossibility of her current life situation, the marriage that was and wasn't, and the different kinds of wishes

[2] We should emphasize once again that the Initial Study Research Team had no direct contact with the patient or her physician. The assessment, recommendations, and predictions of the Initial Study Team were not made available to the clinical team.

represented by a large city on the one hand, and life at home with her husband and child on the other. What stood in the way of living the life with which she felt more comfortable (the "Bohemian" cultural and intellectual life) were the ties to the marriage; the hidden gratifications involved in it and the hidden guilt experienced in relation to it (and in relation to the older problems of which it was the current edition). As these problems were worked through and the patient concomitantly developed a greater capacity for introspection, and some capacity to delay the acting out of impulse, the treatment goals might be amplified beyond these minimal expectable achievements. That is, beyond effecting a more satisfying and harmonious adjustment to the kind of life she had previously had for herself in the large city, the patient might be able to carry her therapy toward a better heterosexual adjustment with or without marriage, which would necessitate some working through of her own frigidity and her spiteful, castrating relationship to men.

Yet many difficulties in the treatment stood in the way of this achievement. The transference, in the intensity of its recapitulation of her severe psychopathology and primitive, exploiting object relationships, would be a strong resistance throughout. The therapist and hospital doctor could readily be seen as the revivals of lover and husband. The therapist-lover would be intellectual, cultured, sophisticated, appreciating her adequately, giving her narcissistic supplies on her own terms and drawn to side with her against the punitive and arbitrary hospital doctor-husband to whom she was bound by reality ties. Should this transference maneuver fail, the patient's frustration and anger could take a variety of turns. She could turn on herself in a deepening depression and withdrawal that would require further electroshock (and remove her from psychotherapy at least for a while); she could turn about and try again with reversed roles, an uninterested and uninteresting therapist versus a kindly, protecting hospital doctor; she could impulsively disrupt her treatment and flee, either to her husband at home, or, perhaps more likely, to her lover. Hopefully, with each go-around the cycle would be of diminished intensity, with the patient having an ever-increasing awareness of the meanings of her behavior and the consequences for herself and others.

These major expected resistances in the course of the treatment would reflect a variety of factors: (1) the patient's poor impulse

control, low anxiety tolerance, and weakened ego; (2) the strength of her aggressions and hostilities and inability to bear the related guilt feelings; (3) the lack of good object relationships in her life; (4) her need to hold onto her narcissistic image of herself as a talented and superior person who was never adequately appreciated; and (5) the readiness with which the patient could try to play off therapist and hospital doctor against one another.

If the therapy took hold, however, a variety of changes in symptoms, attitudes, and behavior would ensue. Though the patient would continue to be beset by her affect disturbances through most of the therapeutic course, the intensity of her mood swings, the degree of anxiety and depression, of acting out, and of inwardly directed destructive urges would be expected to attenuate with each cycle in the treatment and with each growth in awareness and control. One manifestation hitherto missing, guilt feelings, both realistic and neurotic, might emerge during treatment to join the galaxy. But she would perhaps be able to shield herself against such feelings by the attitude, "In view of my life experiences, how else could I have behaved?" She could see this as a sufficient explanation, and it was not anticipated that the psychotherapy would penetrate this narcissistic core sufficiently to uncover the underlying guilt feeling.

In her attitudes and behavior the patient would give up the pretenses in her life, especially the hypocrisy of a marriage held onto because of exploitative gratification and inner guilt ties. This could be a kind of asexual outcome, a life perhaps with a woman friend, of teaching, of cultural and intellectual activities, of gracious living. This would be not a change in character, but rather a fuller acceptance of the predominant strains in her character, a giving up of the wish to be otherwise or trying to appear as if she were otherwise—and thereby the symptoms associated with these conflicts could dwindle away.

A more ambitious outcome that might be reached would be that of a better sexual adjustment, perhaps in a marriage to someone who shared her interests and with whom gratification came from the elegance of their living, the cultural orbit in which they moved, and their association with like-minded friends. Whichever of these outcomes was reached, the patient would be enabled to use her art more successfully as an important conflict-freed activity. In either

case, as the patient worked her way out of the apparently doomed marriage, the child would probably go to the husband, to the satisfaction of all concerned.

This degree of therapeutic change would be accompanied by insight into the nature of her symptomatic patterns and their destructive impact on herself and those in her environment, but not very much into their underlying mechanisms and very little into their early determinants. And all of the achieved insights would be with considerable intellectualization and narcissistic embellishment.

Over-all, in this woman with such intense psychopathology set within such an unstable character structure, a successful supportive-expressive psychotherapy would reach limited treatment goals, goals that would involve not a reorganization of her character but a less conflicted acceptance of her major character dispositions. The Initial Health-Sickness Rating of 30 was expected to rise to 50 (still far from "healthy" functioning). And even here a caution was needed. The patient could be "successful" in many ways in disrupting this treatment, by creating a split in the therapeutic team, by getting depressed enough (and unresponsive enough to therapy), by impulsively breaking out. The initial diagnosis arrived at during the clinical workup of the case was that of a psychotic depressive reaction in a hysterical personality; the Research Team's diagnostic summary was narcissistic character disorder, with oral-infantile, sadomasochistic, and hysterical components.

B. The Formal Predictions

PROCESS PREDICTIONS

1. *If* treated by supportive-expressive psychotherapy, *then* the supportive aspects of the therapy will be carried by the hospital and the hospital physician, and the expressive aspects carried by the therapist in his office on a three-times-a-week basis (/) when adequate ego strength is lacking for utilizing the expressive aspects of psychotherapy a patient will derive sufficient support and control from the hospital structure to be treated expressively to some extent.

2. As treatment progresses, *then* the patient will initially place the therapist in the position of her lover in the large city, intellectual, cultured, and sophisticated, who gives her unending narcissistic supplies on her own terms as a talented, superior person and who

can be forced to side with her against the cruel and arbitrary dictates of the hospital (which she will place in the role of the husband to whom she is bound by reality ties) (/) the reality factors in the therapeutic situation interact with the patient's intrapsychic conflicts to produce the particular transference reactions existing at a given time.

3. As treatment progresses, *then* the development of a useful transference relationship will be difficult and burdened with long periods of suspicion and doubt (/) the core conflicts and their associated defensive patterns give rise to the major transference paradigms, and to the extent that symptoms, attitudes, and life styles are deeply rooted in the character structure, they are only slowly modified in psychotherapy.

4. *If* the supportive aspects of the treatment are carried by the hospital doctor and the expressive aspects by the therapist, *then* her major resistance will take the form of playing off the hospital doctor against the therapist (/) patients with limited ego strength who perceive aspects of treatment as extremely threatening mobilize characteristic defenses in such a way as to disrupt the treatment.

5. *If* supportive-expressive psychotherapy, *then* a major resistance will be the patient's need to hold onto the narcissistic image of herself as a talented, never quite appreciated person (/) the arousal of anxiety stemming from the imminent awareness in treatment of unacceptable impulses or attitudes leads to increased reliance upon characteristic symptoms, character patterns, and/or defenses as a way of augmenting resistance to the conscious recollection of infantile fantasies; and patients with intense infantile fixations are particularly resistant in expressive psychotherapy to modifications of behavior that is dictated by the fixation.

6. *When* the transference maneuvers are frustrated, *then* the patient will (1) either go into a deepening depression, (2) reverse the transference roles, aiming the seduction at the hospital doctor as the one who really understands, and the vituperation at the therapist, or (3) precipitously break off treatment and return to the large city to pick up her life where she left off prior to her return to her husband (/) patients whose neurotic needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects; and patients with well-structured alternative modes of behavior for the

achievement of unconscious goals shift between these modes during the course of treatment.

7. As transference wishes are frustrated, *then* the casting of the therapist and the hospital doctor in the alternative roles of her lover and her husband will appear in a series of cycles (/) patients with well-structured alternative modes of behavior for the achievement of unconscious goals shift between these modes during the course of treatment.

8. *When* the patient reacts depressively to her failure to obtain gratification from the cyclical re-enactment in the transference situation of the relationship between her husband and family on the one hand, and her lover on the other hand, *then* the depressions may at times be severe enough to warrant further ECT (/) patients whose neurotic needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects; and patients who develop a depression of psychotic proportions in reaction to the treatment require somatic intervention (drugs or ECT) in order to facilitate the therapeutic process and to protect the patient against self-destructive behavior.

9. *If* the patient impulsively breaks out of the hospital and even out of therapy, *then* this will represent the most direct disruption of her therapy, and prevention of the achievement of any treatment goals (/) patients whose neurotic needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects; and patients with limited ego strength who perceive aspects of treatment as extremely threatening mobilize characteristic defenses in such a way as to disrupt treatment.

10. As the patient progresses through cyclical re-enactments in the transference situation of the conflict between her husband and family on the one hand, and her lover and all that he represents on the other, *then* some insight into the consequences of her actions both for herself and for those against whom they are directed will gradually develop (/) patients in supportive-expressive or expressive psychotherapy as they re-experience and work through a principal life conflict in the transference relationship acquire insight into the significance of their behaviors.

11. *If* treated by supportive-expressive psychotherapy, after insight into the nature and impact of her symptomatic patterns de-

velops, *then* subsequently changes in these patterns will follow, accompanied by a considerable period of testing out (/) to the extent that intrapsychic conflicts are resolved in psychotherapy, there is a proportional abatement of the symptom, pathological character trait, or neurotic character structure.

12. As supportive-expressive psychotherapy progresses, *then* a conscious sense of guilt will emerge (/) patients with a history of hostile and destructive behavior eventually experience a conscious sense of guilt based upon both the real destructiveness they have wrought and upon the guilt feelings associated with earlier hostile impulses; and to the extent that alloplastic behaviors come under control in psychotherapy, patients experience the disturbing affects and ideation formerly warded off by that behavior.

13. *If* treated by supportive-expressive psychotherapy, *then* the intensity of the mood swings and the symptom swings will gradually level off with each cycle, but over a long period of time, and the patient will probably be symptom ridden through several years of treatment (/) to the extent that intrapsychic conflicts are resolved in psychotherapy, there is a proportional abatement of the symptom, pathological character trait, or neurotic character structure; and patients with profound neurotic conflicts, inadequately functioning defense mechanisms, low anxiety tolerance, and limited psychological mindedness require prolonged supportive treatment in order to achieve even partial freedom from painful or destructive symptoms.

14. *If* supportive-expressive psychotherapy with concomitant hospitalization, as treatment progresses, *then* the need for continued hospitalization will decrease (/) the rechanneling of impulses away from destructive behavior into more socially acceptable activity results in a decreasing need for hospitalization.

15. *If* hospitalized, as treatment progresses, *then* after the period of a year or two, before the patient is seen on only an outpatient basis, the transition through the day hospital will be necessary (/) patients with limited ego strength and anxiety tolerance, and destructive behavior, who are treated by psychotherapy in conjunction with hospitalization and who begin to modify their destructive behavior require a gradual transition to full outpatient status (through day hospital and/or foster-home placement).

16. As therapy progresses, *then* the patient will show an increased capacity to direct her impulses into more socially acceptable (though still narcissistically colored) channels such as the creation of a cultural "salon" etc. (/) patients in supportive-expressive psychotherapy with limited ego strength, low anxiety tolerance, and limited psychological mindedness but with a strong motivation for change are unable to achieve major intrapsychic change but can achieve more socially acceptable modes of expression of unconscious conflict and therefore an improved life adjustment.

17. *If* treated by supportive-expressive psychotherapy, as improvements in the patient's adjustment, level of functioning, and symptomatic expressions occur, *then* these will represent changes in the intensity of the expression of her impulses and of the destructive ways in which they emerge rather than structural changes in the ego (/) supportive aspects of psychotherapy are capable of leading to a more gratifying and adaptive adjustment via modifications in the intensity or channeling of impulse expression based on shifts in impulse-defense configurations without full conflict resolution; and to the extent that conflicts are resolved, patients are enabled to use their capacities for productive work more effectively.

OUTCOME PREDICTIONS

18. *If* treated by supportive-expressive psychotherapy, *then* certain minimal treatment goals (but no more) can be met and a better life adjustment will be effected (/) patients in supportive-expressive psychotherapy with limited ego strength, low anxiety tolerance, and limited psychological mindedness but with a strong motivation for change are unable to achieve major intrapsychic change but can achieve more socially acceptable modes of expression of unconscious conflict and therefore an improved life adjustment; and supportive aspects of psychotherapy achieve the result of more adaptive functioning by means of gratifying some of the patient's psychological needs which he otherwise is unable to gratify; and the partial resolution of unconscious conflict makes possible shifts in impulse-defense configurations which are reflected in behavioral changes.

19. *If* treated by supportive-expressive psychotherapy and *if* limited goals are fulfilled, *then* the patient will break off the present marital situation (/) the improvement of adaptive functioning re-

sulting from supportive psychotherapy leads to a decrease in the patient's self-destructive behavior.

20. *If* supportive-expressive psychotherapy is carried to a successful conclusion, *then* at least three or four years will be required for even these minimal treatment goals to be achieved (/) patients with profound neurotic conflicts, inadequately functioning defense mechanisms, low anxiety tolerance, and limited psychological mindedness require prolonged supportive treatment in order to achieve even partial freedom from painful or destructive symptoms.

21. *When* at the outcome of treatment, and after the patient has come to recognize the impossibility of her current marital situation, *then* the patient's anxieties will diminish (/) patients whose primary symptoms are reduced in intensity experience a reduction in intensity of the associated secondary symptoms.

22. At the end of treatment, after the patient has come to recognize the impossibility of the current marital situation, *then* there will be a reduction in the intensity of the patient's acting-out impulses (/) patients with an alloplastic orientation, who in therapy realize significant gratifications, show a diminution of alloplastic behaviors; and patients with limited ego strength manifested by poor impulse control and poor anxiety tolerance can check their most flagrant symptoms when the environment offers controls and sanctions appropriate alternative modes of impulse expression; and to the extent that external factors trigger intrapsychic conflicts there is a proportional enhancement of painful affects and defenses.

23. At the end of treatment, after the patient has come to recognize the impossibility of the current marital situation, *then* there will be a reduction in the intensity and/or frequency of her depressive swings (/) to the extent that external factors trigger intrapsychic conflicts there is a proportional enhancement of painful affects and defenses.

24. At the end of treatment, after the patient has come to recognize the impossibility of her current marital situation, *then* her life adjustment will become overtly more harmonious (/) the improvement of adaptive functioning resulting from the supportive aspects of psychotherapy leads to better interpersonal relationships and a greater capacity to work productively.

25. *If* the patient gives up the marriage on the basis of recognizing the impossibility of maintaining it, *then* she will be willing to

have the child go to the husband (/) the successful resolution of unconscious conflict allows the patient the freedom to find the most advantageous reality setting for his own needs and for the needs of the significant others in his life; and patients who gain insight into the meaning of certain situational factors which they previously denied make realistic and appropriate modifications in their lives.

26. *If* treated by supportive-expressive psychotherapy and *if* successful, *then* the patient will require continued psychotherapy as she tries to cope with life "outside" (/) patients who achieve only a minimal resolution of conflict in a predominantly supportive psychotherapy effect a more adaptive adjustment, but are vulnerable to some continuing life difficulties consistent with the unresolved conflicts and may require further treatment after termination.

27. *If* treatment goals are enlarged to include a better heterosexual adjustment with or without marriage, entailing a working through of her frigidity, her castrating relationships with men, etc., and working through of the deep childhood hostilities toward both her parents, *then* these will be achieved only on the basis of psychoanalysis (/) treatments other than psychoanalysis for patients whose symptoms reflect lifelong deeply rooted characterological problems are not able to facilitate the resolution of all of these intrapsychic conflicts and their attendant symptoms as fully as psychoanalysis can.

28. *If* treated by supportive-expressive psychotherapy and *if* maximally successful, *then* the patient will not continue to a more thoroughgoing reconstructive therapy like psychoanalysis (/) patients with limited ego strength and deep-seated characterological problems who become comfortable through a predominantly supportive treatment do not seek a more thoroughgoing reconstructive expressive psychotherapy.

29. *If* treated by supportive-expressive psychotherapy, *then* her basic character traits will not change but the intensity of their expression and the destructive (both to herself and to others) ways in which they emerge will be dampened (/) supportive aspects of psychotherapy are capable of leading to a more gratifying and adaptive adjustment via modifications in the intensity or channeling of impulse expression based on shifts in impulse-defense configurations without full conflict resolution.

30. *If* treated by supportive-expressive psychotherapy, *then* she

will be able to use such things as her art more successfully as sublimatory activities (/) to the extent that a psychotherapy is supportive, it involves a strengthening of certain defenses and a concomitant strengthening of the adaptive capacities of the patient's ego.

31. *If* treated by supportive-expressive psychotherapy, *then* the patient will develop insight into the nature of her symptomatic patterns and their impact upon herself and her environment, but will not develop insight into the underlying mechanisms and early determinants of her symptomatic pattern (/) patients in supportive psychotherapy achieve limited insight into the maladaptive solutions they have been using, even less insight into the content of their unconscious conflicts, and still less into the underlying mechanisms and early determinants of their conflicts.

6

CONFIRMATION STUDY

At the termination period and again at follow-up two years later, the patient was studied by a research team which had no part in making the predictions and was intentionally kept unaware of the Initial Study Team's thinking about the case. The termination and follow-up teams had access to the entire clinical record including the therapist's notes. They interviewed the patient, the therapist, the supervisor if one was involved, and at times pertinent others, and had a comprehensive report of psychological-test changes. They used all of these data to write a detailed summary of changes in patient and situational variables and a description of the vicissitudes of the treatment. The ultimate objective was to describe *what* changes occurred and *how* they came about.

Upon completing these studies, this research team was given two true-false forms: an individually constructed evidence form written especially for the specific patient under study on the basis of the Initial Study, and a core-evidence form which was the same for all patients (see Appendices A and B). These were to be filled out independently by members of the Treatment Variables Team and the Situational Variables Team, as well as by the therapist and supervisor. They had already been answered or keyed by the original predictors. The Confirmation Study group, consisting of two independent judges, read all of the data but referred especially to the above-mentioned forms to make their judgments about the correctness of the predictions and assumptions. In part A we present a highly condensed summary of the treatment course and outcome, followed by part B, the confirmation judgments on each prediction.

A. Condensed Account of the Treatment Process and Outcome

The patient had come to psychiatric hospitalization severely depressed, in danger of suicide, and with a total life progressively disorganized by the unrestrained acting out of severe narcissistic character problems over a period of many years. Diagnostic study revealed intense frustration and rage stemming from feelings of inordinate oral deprivation, superimposed severe phallic conflicts leading to an almost blanket repudiation of femininity, and a weakened ego with minimal anxiety tolerance and impulse control, beset by disorganizing surges of affect and impulse pressures leading at times to psychotically regressed states.

The patient's first overt decompensation was triggered by her adoption of an infant boy and her coming face to face with her own rejection of the maternal role. Over the succeeding years she maintained her equilibrium outside a hospital only because of the willingness of her environment to tolerate her living out her conflicts via a double life, with a lover at hand to indulge her while the husband supported her from afar. The husband's ultimatum that broke up this arrangement led to the collapse of her secondary gains and the eruption of the acute depressive illness as a reaction to the loss of narcissistic supplies.

The psychiatric treatment consisted of long-term strict hospital management with full implementation of an "antidepressive" regimen, accompanied first by a course of electroshock therapy, and subsequently by long-term expressive-supportive psychotherapy. The shock treatment served to lift the acute, suicidal depression and make the patient more "accessible." The psychotherapy continued for three years, during the latter half of which it bore the full treatment burden (the patient having gone from inhospital, to day hospital, to full outpatient status during this period).

Within the psychotherapy, the therapist fulfilled a variety of functions. He could be the returned benevolent father, a kind counselor, always sympathetic, genuinely concerned, and basically respectful of her, not always effectual (for after all, men were always weak and unneeded appendages to the strong women). He could also be the new version of the mother, (more benevolently) guiding the

patient to standards of performance and achievement. And in each of these guises he could tolerate the patient's "badnesses," the fierceness of her hatreds, the hurtfulness of her interpersonal relationships, the insatiable demands for oral-narcissistic fulfillments, being only rarely provoked to counteranger and without loss of sustaining interest.

Within this context, the patient gradually came to feel that the therapy did not pose a pressure to change herself. She could remain herself, as she was, and give up trying to do what she felt was impossible, to be other than what she was (for example, a responsible wife, mother, and homemaker—in this connection her treatment course became grossly disturbed with each of the two visits from her son, when she tried to press herself back into the role of the caretaking mother). In effect, she could be exactly the kind of person she felt most comfortable being (i.e., no matter how "unfeminine" or anything else) and, without having to feel regrets or guilt, rearrange her life to get out of a very conflict-triggering environment into one more attuned to and appropriate to her own character and behavior predispositions. She could, that is, (with the therapist's benediction) concentrate not only on changing herself, but on changing her environment to suit herself as well.

This end the therapist accomplished with a variety of techniques. He entered actively into an advice-giving role in relation to the myriad life difficulties the patient faced, the problem of the divorce, her living arrangements and life style, the pursuit of her art and her other interests, the question of the son's custody, the handling of money. At each point the therapist was willing to keep the main focus of inquiry on the problem in reality (as against a main focus on its underlying intrapsychic sources) and at each point did this skillfully enough so that the patient never felt pressured toward *his* solutions. She indicated her feeling that she had worked out each direction, that he had never led the way. Of her return to art she said that the therapist was right, that "I would work again when my life was more straightened out, not to worry about it or force myself."

Alongside the counseling role, the therapist took advantage of the patient's intellectualizing propensities by giving her formulae (for example, that depressed feelings reflected anger that was out of awareness) that she could then use in the continued service of self-

mastery. It was this that was introjected. The therapist's image and his voice were conjured up in the face of incipient depression; she relived what he had said and then used it each time to unravel and dissipate the new depressive feelings.

An equally important component of the therapeutic work was the concomitant consistent *underplaying* of interpretive effort. The therapist by and large did not focus on intrapsychic conflict; he did not (very much) relate present to (unconscious) past. He avoided major transference battles by riding throughout the therapy on the basically uninterpreted positive affects. Transference responses to himself were minimally interpreted (and he was usually rebuffed when such interpretations were, sporadically, offered); the triangular relationship of hospital doctor-patient-therapist was allowed to be a vehicle for splitting the transference and draining off its negative components upon the hospital doctor; and even the provocative flight abroad of the patient with an invalid lover on a vacation just before treatment termination was not interpreted as the transference reliving of the very similar triangular situation in which the patient had gotten herself trapped before she came to treatment. It was the fact that the patient could act out her uninterpreted transference yearnings with the invalid lover who would not forsake her but continue with her after treatment stopped that helped her to tolerate leaving the therapy and therapist without becoming depressed again.

In these many ways, with this patient of very weak ego structure coping unsuccessfully with very intense conflicts, the therapist pursued a course much more explicitly supportive than expressive, designed to strengthen the defenses in their struggle with drive (to support her intellectualization, her reaction formations, her compulsive routines, her denials and avoidances, to ward off full awareness of the narcissistic core, and the linked guilt, anxiety, and desolation) and to encourage more adaptive behavioral patterns (return to and development of her interests—i.e., her art—and giving up what she felt to be her anti-interests—i.e., her home, husband, and child).

With this constant support through treatment, the patient's symptoms subsided and she recouped her battered ego resources enough to make a major change in her life situation. With this help, the patient gave up the grossly need-inappropriate object ties that had only accentuated her neurotic inabilities (home, husband, and child)

and struck out as the kind of career woman with the unconventional Bohemian life and cultural-intellectual interests that she wished for herself. Two factors helped sustain this. The relationship with the new lover protected her against loneliness and a too sudden loss of narcissistic supplies as treatment came to an end. The introjected therapist could continue to be summoned up by her; if need be she could return to him. The over-all assessment of the patient's gain, measured by the Health-Sickness Rating Scale, was from the initial 30, past the predicted 50, to a termination level of 57.

How do we understand that this kind of "transference cure" not only maintained itself, but consolidated significantly to a considerably higher functional level by the time of follow-up (Health-Sickness Rating at follow-up was 74!), and this in the face of all the cautions about the tenuousness of the patient's achievements and her continued vulnerability to regressive reversal in the face of threats to her narcissistic equilibrium? Here there came into play an interacting facilitation between treatment and life circumstance. Treatment had enabled the patient to reconstitute herself free of a grossly conflict-triggering life. It allowed her to be able (without guilt) to seek out or at least to take advantage of a (for her) happier, more need-gratifying, need-appropriate constellation of life circumstances.

This she found in the coming into her orbit of the man who became her new husband, a man who could constitute for the patient the kind of culturally and intellectually appreciating and emotionally nurturing environment that exactly fulfilled her needs and to which she was now willing (for the first time) to return an emotional *quid pro quo*. The prior marriage had consisted of too little emotional gratification and too much emotional demand (further accentuated by the adoption and the requirements of motherhood added to those of wife and homemaker). The present marriage with a husband far more congenial to her interests precisely altered this balance. The intervening treatment had made it possible for her to get out of the one and accept the other when it became available. The son's advancing age played its supporting role; the patient who could not care for an infant felt she could understand an adolescent. And "I'm a better grandmother type (no day-to-day responsibility) than mother . . ."

To make the transition from a woman alone, threatened ultimately with the devastation of loneliness which would be especially

severe for someone so dependent on continual external supplies, to a woman in a marriage that promised a new, more favorable emotional balance, the patient needed the explicit approval of the therapist. With that secured, she could enter the new marriage and the new life situation. She felt helped by the therapist to take on the new object as she had been helped to give up the old. She had learned that it was all right to have her needs maximally met and she learned in turn that she could then feel more giving. And again, there was a facilitating interaction. At the time of follow-up, the patient who was now consolidated with her new husband (as the inheritor of the positive transference mantle of the therapist) could feel freer of her sense of dependence upon the actual therapist. Enough of him was now, in her, "transferred" to the husband, for the patient to have the "psychic termination" of her therapy. The residual feeling toward the therapist was one of gratitude and admiration. Realistically she saw him as someone who could and would help her further if she needed it, but at this point she did not feel the need for such help.

Thus an explicitly supportive psychotherapy enabled a woman deemed far too ill (with too weak an ego and too severe instinctual conflicts) for a major conflict-resolving, reconstructive therapy like psychoanalysis to achieve nonetheless very major changes in her life functioning, to be cured of her symptoms, and to get from a seriously conflict-sustaining to a most need-gratifying life situation. The fact that she could find and consolidate this new need-gratifying life (a change made possible by treatment) in turn made it possible to sustain, and even enhance, all the improvements in functioning achieved in treatment, despite the therapy's no longer being active in her life, and despite the minimal basic characterological changes brought about in the therapy. The originally presenting diagnosis of narcissistic character neurosis was still valid; the difference was the progression from a decompensated state (destructive in its impact upon herself and her significant others) to a compensated state, balanced in a mutual give-and-take in a marriage with a person constituted quite similarly to herself.

A last note: As against the kinds of resolution achievable in psychoanalysis, this patient's functional level might well be less proof against environmental vicissitudes, more dependent on the exact

maintenance of the particular configuration of the obtained narcissistic gratifications. Thus far she had not been put to such a test.

B. Fate of Predictions and Assumptions

PROCESS PREDICTIONS

1.[1] *If* treated by supportive-expressive psychotherapy, *then* the supportive aspects of the therapy will be carried by the hospital and the hospital physician, and the expressive aspects carried by the therapist in his office on a 3 x/week basis (/) IA′1[2] When adequate ego strength is lacking for utilizing the expressive aspects of psychotherapy a patient will derive sufficient support and control from the hospital structure to be treated expressively to some extent.

Outcome:[3] Condition +, Prediction $\mp$, IA′1 not tested owing to incorrect initial assessment of a patient variable.

Discussion

The conditions were fulfilled: all the judges agreed that the treatment was indeed supportive-expressive psychotherapy. The prediction was largely, though not completely, unfulfilled. Although the hospital physician did maintain a supportive role throughout the treatment, this did not enable the therapist to carry out a largely expressive treatment. The interventions of the therapist fell largely

[1] For purposes of clarity, the predictions and hypotheses listed in Chapter 5 are restated here.

[2] Code numbers following the "on the grounds that" symbol refer to the numbers the hypothetical statements have been assigned in the hierarchical system in which they have been ordered. Roman numeral I stands for all the statements about expressive aspects of psychotherapy. Roman numeral II stands for statements about supportive aspects, and C stands for statements from the "Common Core" of hypotheses about psychotherapy in general. Letters and Arabic numerals stand for the subcategories under those headings arranged according to logical relationships of subordination.

[3] + signifies "fulfilled" or "confirmed" in the case of a contingency or prediction; it signifies "strengthened" in the case of an assumption.

— signifies "not fulfilled" with respect to contingencies and predictions; "weakened" with respect to assumptions.

$\pm$ signifies "mostly true" with respect to contingencies and predictions; "somewhat strengthened" with respect to assumptions.

$\mp$ signifies "mostly untrue" with respect to contingencies and predictions; "somewhat weakened" with respect to assumptions.

+N signifies negative confirmation of a hypothesis, i.e., when a condition assumed to be essential is *not* met and the postulated resulting event does *not* take place, there is some basis to infer that the postulated condition was indeed essential.

into the category of supportive psychotherapy. He acted primarily as a kindly counselor to the patient; interventions aimed toward the mobilization and resolution of unconscious conflicts and the development of insight were at a minimum. The clear-cut "division of labor" between hospital doctor and therapist envisioned by the predictors did not take place partly because the patient's ego strength was even more limited than had been originally thought. She could not tolerate expressive psychotherapy, and consistently rebuffed whatever efforts were made throughout the treatment to deal interpretively with her behavior and affects.

Limited ego strength, however, was not the only reason for the failure of this psychotherapy to be as expressive as the Initial Team had expected it to be. Another, perhaps even more important determinant of the treatment mode settled upon by the therapist was the persistent reality stress experienced by the patient throughout almost the whole of her treatment. Her husband filed for divorce shortly after her admission to the hospital. Throughout the psychotherapy she was involved in the divorce litigation and in struggling over the custody of her adopted son. These developments make it necessary to call upon another hypothesis to account for the fact that the therapy was more supportive than expressive, II′2 "Patients in psychotherapy with important expressive components who are confronted with reality stresses in their life situation that seriously endanger their psychic equilibrium require shifts to a predominantly supportive therapy during the period of reality stress." This statement captures the over-all conviction of the research team that the therapist had been correct in providing primarily supportive treatment for this patient.

2. As treatment progresses, *then* the patient will initially place the therapist in the position of her lover in the large city, intellectual, cultured, and sophisticated, who gives her unending narcissistic supplies on her own terms as a talented, superior person and who can be forced to side with her against the cruel and arbitrary dictates of the hospital (which she will place in the role of the husband to whom she is bound by reality ties) (/) CIIB 1 The reality factors in the therapeutic situation interact with the patient's intrapsychic conflicts to produce the particular transference reactions existing at a given time.

Outcome: Condition +, Prediction ±, CIIB 1 ±.

Discussion

The prediction was partially fulfilled. The patient did consistently cast the hospital and hospital doctor in the role of the "cruel and arbitrary," prosaic and unimaginative husband. She did not, however, experience the therapist in quite the manner predicted. He did not emerge for her, even in the early phases of treatment, as "intellectual, cultured, and sophisticated"; rather, she experienced him as a warm, sympathetic, nonthreatening man upon whose goodwill she could count. The assumption is partially substantiated, since the provision of two separate figures, one of whom, the hospital doctor, took a more active role in guiding and controlling her, did facilitate the splitting of the transference between them. But why did this split not occur in the manner that was predicted on the basis of the patient's past behavior? For one thing, in reality the therapist by no means fitted the stereotype of the Bohemian lover; on the contrary, he would be perceived by his peers as a practical, down-to-earth man, and not one to be dazzled by a "talented superior person" to the extent of yielding to her narcissistic demands. In the face-to-face supportive psychotherapy that was carried out, there was no effort on his part to preserve a psychoanalytic personal anonymity; on the contrary, he was very much "there" as a real person to her throughout the treatment. The interaction between the nature of the treatment itself and the real qualities of the therapist prevented the patient from making the anticipated transference distortion. This made it necessary to write a postdictive assumption to account for what had taken place: CIIB 1.3 "The more supportive the treatment mode, the greater is the tendency of the transference perception to conform to the actual personality attributes of the therapist."

3. As treatment progresses, *then* the development of a useful transference relationship will be difficult and burdened with long periods of suspicion and doubt (/) CIIA The core conflicts and their associated defensive patterns give rise to the major transference paradigms. CIA 4 To the extent that symptoms, attitudes, and life styles are deeply rooted in the character structure, they are only slowly modified in psychotherapy.

Outcome: Condition +, Prediction −, CIIA and CIA 4 not tested because of incorrect initial assessment of a patient variable.

Discussion

While the conditions were fulfilled, the prediction failed to be substantiated. The predictors had thought that "the lack of any previously good object relationships from the whole of her former life will make the development of a really useful transference relationship more difficult." In retrospect, it appears that the predictors were unable adequately to assess the "goodness" of her early object relationships. She had had a benevolent grandmother during her most crucial years of childhood. In adulthood she had shown her ability to form a trusting and helpful relationship with her former therapist. Hence the assumptions underlying the predictor's expectations are neither assailed nor strengthened by the outcome.

Another assumption, one that did not enter into the making of the original prediction, is tested by this outcome, I'1.7 "Transference reactions that cause the patient to see the therapist as potentially friendly and helpful facilitate the development of the therapeutic alliance."

4. *If* the supportive aspects of the treatment are carried by the hospital doctor and the expressive aspects by the therapist, *then* her major resistance will take the form of playing off the hospital doctor against the therapist (/) CIA 2.1 Patients with limited ego strength who perceive aspects of treatment as extremely threatening mobilize characteristic defenses in such a way as to disrupt the treatment.

Outcome: Condition −, Prediction ∓, CIA 2.1 not tested owing to failure of the contingency to be fulfilled.

Discussion

Had an attempt been made to carry out primarily expressive psychotherapy, it would inevitably have involved frustration of the patient's transference wishes, and hence would have mobilized intense resistance in the service of maintaining her narcissistic image of herself as a "talented superior person" who ought to be given special privileges and gratifications. In fact the psychotherapy involved very little frustration for the patient, and the transference implications of her behavior and utterances were never made the focus of the treatment. The patient never exhibited the predicted tendency to undermine and disrupt her treatment through playing the therapist off against the hospital doctor because she did not

experience enough anxiety in psychotherapy to put such mechanisms into action. Hence the assumption was not tested. A further hypothesis is, however, upheld by the outcome. This is CIA 2.2 "To the extent that a patient finds significant gratifications in the treatment situation, he is able to govern symptomatic behavior in such a way as to prevent it from disrupting treatment."

5. *If* supportive-expressive psychotherapy, *then* a major resistance will be the patient's need to hold onto the narcissistic image of herself as a talented, never quite appreciated person (/) CIA The arousal of anxiety stemming from the imminent awareness in treatment of unacceptable impulses or attitudes leads to increased reliance upon characteristic symptoms, character patterns, and/or defenses as a way of augmenting resistance to the conscious recollection of infantile fantasies. IA′2.26 Patients with intense infantile fixations are particularly resistant in expressive psychotherapy to modifications of behavior that is dictated by the fixation.

Outcome: Condition +, Prediction ∓, CIA and IA′2.26 not tested because of failure of a treatment variable to develop as anticipated.

Discussion

The psychotherapy was far less expressive than the predictors had expected it to be, and was aimed primarily at the strengthening of defenses, not at any major alteration in the patient's self-concept. The assumptions are not tested because the patient's narcissistic image of herself was never made the focus of the treatment, and hence the anxiety that would have been expected to arise in connection with such explorations was not mobilized.

6. *When* the transference maneuvers are frustrated, *then* the patient will (1) either go into a deepening depression, (2) reverse the transference roles, aiming the seduction at the hospital doctor as the one who really understands, and the vituperation at the therapist, or (3) precipitously break off treatment and return to the large city to pick up her life where she left off prior to the return to her husband (/) CIIC Patients whose neurotic needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects. CIIC 1 Patients with well-structured alternative modes of behavior for the achievement of unconscious goals shift between these modes during the course of treatment.

Outcome: Condition ∓, Prediction —, CIIC and CIIC 1 not tested because the contingency was not sufficiently fulfilled.

Discussion

The contingency was largely unfulfilled, as the therapist remained in the transference position of a good father and frustrated her very little. She was able to displace transference wishes to her invalid lover, avoiding frustration by living out her wishes with a substitute object. As a result, none of the anticipated reactions to the frustration of transference wishes emerged. Hence the assumptions underlying the prediction are not tested. The supports this patient derived both from the hospital setting and from the therapist himself served to bolster her against the anticipated depression and treatment disruption. (See prediction 8 for a full discussion of this point.) Hence the outcome of this prediction once again tends to substantiate assumption CIA 2.2 "To the extent that a patient finds significant gratifications in the treatment situation, he is able to govern symptomatic behavior in such a way as to prevent it from disrupting treatment."

7. As transference wishes are frustrated, *then* the casting of the therapist and the hospital doctor in the alternative roles of her lover and her husband will appear in a series of cycles (/) CIIC 1 Patients with well-structured alternative modes of behavior for the achievement of unconscious goals shift between these modes during the course of treatment.

Outcome: Condition $\mp$, Prediction $-$, CIIC 1 not tested because of failure of contingency to be fulfilled.

Discussion

As in the preceding prediction, the contingency was largely unfulfilled, since the patient experienced very little frustration of her transference wishes in psychotherapy. The prediction was not confirmed; there was no cyclic alternation of transference reactions distributed between the therapist and hospital doctor, who, on the contrary, remained fixed in their transference roles throughout treatment. One reason for the stability of the transference pattern, in contrast to the predicted cycling, was that the therapy was too supportive and the therapist too "real" for such cyclic manifestations to emerge. This outcome lent support to the postdictive statement written for prediction 2 above, CIIC 1.3 "The more supportive the treatment mode, the greater is the tendency of the transference per-

ception to conform to the actual personality attributes of the therapist."

8. *When* the patient reacts depressively to her failure to obtain gratification from the cyclical re-enactment in the transference situation of the relationship between her husband and family on the one hand, and her lover on the other hand, *then* the depressions may at times be severe enough to warrant further ECT (/) CIIC Patients whose neurotic needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects. IIE 1 Patients who develop a marked and prolonged depression in reaction to the treatment require somatic intervention (drugs or ECT) in order to facilitate the therapeutic process and to protect the patient against self-destructive behavior.

Outcome: Condition −, Prediction −, CIIC and IIE 1 not tested because of failure of the contingency to be borne out.

Discussion

The contingency was not fulfilled. She did become depressed at times, but not so much so as to warrant electroshock treatment, nor to interfere with the psychotherapy. Furthermore, these affect states were not in response to the failure to obtain gratification of transference wishes as postulated in the contingency, but rather to various failures and disappointments in her life outside of treatment. The research team inferred that the consistently supportive role played by the therapist and hospital doctor so as to maintain adequate gratification of this patient's narcissistic needs throughout the treatment effectively prevented her depression from ever again reaching the intensity that had brought her into treatment in the first place. This inference lends support to IIC 1 "Patients who derive gratification of infantile needs from the supportive aspects of the treatment situation experience reduction of symptoms associated with this gratification without a resolution of their conflicts." A further factor that served to bolster this patient against severe depressive reactions was the protectiveness of the life situation that she was helped to establish for herself during her psychotherapy. This included involving her half-time in the day hospital after her discharge from the hospital. During this eight-month transition period, she was encouraged to take a volunteer job. When her success as a volunteer led to her being taken on as a paid, full-time employee, her day-hospital

treatment was terminated. She thus experienced a gradual "weaning" from the hospital, accompanied by the provision of opportunities for more mature satisfactions as the treatment progressed. These developments substantiate assumption II′1.2 "Patients who are unable to lead a stabilized organized life, and who live in a family-care home and/or attend day hospital during their psychotherapy derive additional necessary support in achieving greater stability in their lives." This patient readily acknowledged both at termination and follow-up that whenever she lacked a clear-cut daily schedule and found herself with nothing to do, she swiftly lapsed into an aimless and disorganized state, with feelings of depression. It is very likely that, had she been left more to her own devices upon discharge from the hospital, a more severe depression would have occurred.

9. *If* the patient impulsively breaks out of the hospital and even out of therapy, *then* this will represent the most direct disruption of her therapy, and prevention of the achievement of any treatment goals (/) CIIC Patients whose neurotic needs are not gratified within the transference respond to this frustration with regressive and/or resistive reactions, and/or painful affects. CIA 2.1 Patients with limited ego strength who perceive aspects of treatment as extremely threatening mobilize characteristic defenses in such a way as to disrupt treatment.

Outcome: Condition —, Prediction does not apply, CIIC and CIA 2.1 not tested because of failure of the contingency to be fulfilled.

Discussion

As the anticipated contingency did not take place, the assumptions underlying the prediction were not put to the test.

10. As the patient progresses through cyclical re-enactments in the transference situation of the conflict between her husband and family on the one hand, and her lover and all that he represents on the other, *then* some insight into the consequences of her actions both for herself and for those against whom they are directed will gradually develop (/) IB″1.31 Patients in supportive-expressive or expressive psychotherapy as they re-experience and work through a principal life conflict in the transference relationship acquire insight into the significance of their behaviors.

Outcome: Condition —, Prediction ±, IB″1.31 not tested because of failure of the contingency to be fulfilled.

Discussion

Despite failure of a cyclical re-enactment of the transference to take place and be worked through, the patient nevertheless did achieve significant insight. At follow-up she was described as quite mindful of herself and her possible impact upon the environment. All evidence of externalization had disappeared: she was now inclined to look inward rather than outward for the causes of her unhappiness. When she felt depressed, she would remind herself that this might be due to feeling angry about something, and she would then, usually successfully, seek out the angry feelings and deal with them realistically. She was clearer about her own emotional needs, and was able to establish those circumstances for herself in which she could function better and enjoy greater satisfaction. In addition to the markedly enhanced insight into herself, she also demonstrated at follow-up an unexpected sensitivity to the feelings of her adolescent son and of her former and present husbands, which enabled her to deal appropriately with all of them. All of these changes in the direction of enhanced insight had taken place without any insight into the nature of the transference relationship. At follow-up she remained as oblivious as she had ever been to the transference implications of her feelings toward the therapist. Instead, she acted out her persisting positive transference in a comfortable manner by putting herself "completely at the disposal" of the research team, and thus demonstrating her gratitude toward the good therapist.

The original proposition underlying the predictor's expectation that insight would develop was not tested because the anticipated re-experiencing and understanding of conflicts did not occur. To account for the development of insight in the absence of interpretive working through of the transference relationship, a further statement may be called upon, II1A2 "Patients with limited ego strength and limited anxiety tolerance are able, after they develop a stable positive relationship with the therapist, to tolerate some partial insights into the nature and meanings of their symptoms and maladaptive behaviors." That insight into the transference was strikingly absent from the patient's self-awareness at follow-up tends to confirm a further statement: II1A2.2 "Patients with limited ego strength and limited anxiety tolerance who are treated by a pre-

dominantly supportive psychotherapy develop only a minimal explicit understanding of the nature of the transference situation."

11. *If* treated by supportive-expressive psychotherapy, after insight into the nature and impact of her symptomatic patterns develops, *then* subsequently changes in these patterns will follow, accompanied by a considerable period of testing out (/) CIII To the extent that intrapsychic conflicts are resolved in psychotherapy, there is a proportional abatement of the symptom, pathological character trait, or neurotic character structure.

Outcome: Condition ±, Prediction ±, CIII not tested because of failure of a treatment variable to be fulfilled.

Discussion

The contingency for this prediction is identical with the prediction proper in 10 above. Insight did develop, although not quite as much as the predictors had anticipated. Behavioral change did occur as predicted, and some of it seems clearly related to insight. Particularly her successful battle against depression after the termination of treatment was related to her insight into depression as a manifestation of suppressed anger. This insight, however, is not a manifestation of the kind of conflict resolution postulated in the assumption as the basis for behavioral change in this case. Rather, it can be seen as a partial insight on the way to conflict resolution.

One of the most marked behavioral changes noted at follow-up was her ability, at age 45, to establish a new marriage which was far more satisfactory than any of the relationships she had been able to establish throughout her adult life. (1) With the support of the therapist she had been able to achieve partial resolution of the conflicts underlying her fear of giving up her highly incompatible marriage. Once free of her legal and emotional entanglement with her husband, she was able to make use of the opportunity for a new relationship. This lent support to the following statement: IB′1.1 "Patients who achieve only a partial resolution of conflict, which nonetheless leads to a modification of a neurotic life circumstance, are able to use their new freedom to establish a more gratifying way of life." (2) Here the "neurotic life circumstance" was the marriage, which was on the one hand a *manifestation* of her neurosis, and on the other hand a source of conflict-triggering stimuli that aggravated and perpetuated her illness.

12. As supportive-expressive psychotherapy progresses, *then* a conscious sense of guilt will emerge (/) CIIC 2 Patients with a history of hostile and destructive behavior eventually experience a conscious sense of guilt based upon both the real destructiveness they have wrought and upon the guilt feelings associated with earlier hostile impulses. CIC 3 To the extent that alloplastic behaviors come under control in psychotherapy, patients experience the disturbing affects and ideation formerly warded off by that behavior.

Outcome: Condition +, Prediction −, CIIC 2 −, CIC 3 not tested because of incorrect initial evaluation of a patient variable.

Discussion

Despite fulfillment of the contingency, this patient never manifested a conscious sense of guilt. She remained too infantile and narcissistic in her character organization to take her past behavior seriously, or to feel deeply concerned about the distress she had caused. A qualifying statement is required to modify the assumption originally assigned. This necessitated the writing of a postdictive hypothesis CIIC 2.2 "Markedly narcissistic patients with limited ego strength do not develop guilt in psychotherapy unless major reconstructive treatment is carried out."

The second statement, CIC 3, was assigned on the basis of the predictors' belief that much of the patient's wasteful, heedless, and destructive behavior was in the service of denying deeper feelings of guilt and inadequacy. When the research team reassessed the variable "unconscious guilt" at follow-up, they saw it somewhat differently. They thought that many of the historical facts the initial team pointed to as evidence of unconscious guilt were really more related to the patient's rejection of her femininity. Furthermore, they failed to see her behavior as so destructive and self-destructive as it had been originally described; hence they saw less "hostility and destructiveness" for the patient to feel guilty about. While it was clear that her illness had had a destructive effect upon her husband and child, the research team at termination and follow-up did not see this destructiveness as the goal of the illness, but rather as an inevitable side effect of this woman's inability to accept a mothering feminine role.

13. *If* treated by supportive-expressive psychotherapy, *then* the intensity of the mood swings and the symptom swings will gradually

level off with each cycle, but over a long period of time, and the patient will probably be symptom ridden through several years of treatment (/) CIII To the extent that intrapsychic conflicts are resolved in psychotherapy, there is a proportional abatement of the symptom, pathological character trait, or neurotic character structure. II 1.2 Patients with profound neurotic conflicts, inadequately functioning defense mechanisms, low anxiety tolerance, and limited psychological mindedness require prolonged supportive treatment in order to achieve even partial freedom from painful or destructive symptoms.

Outcome: Condition +, Prediction +, CIII not tested because of failure of a treatment variable to develop as anticipated. II 1.2 ±.

Discussion

The prediction was borne out, for the patient's symptoms did show gradual diminution without being entirely relieved even at the time of the termination. The assumption regarding conflict resolution was not tested since the treatment neither aimed toward nor achieved a resolution of unconscious conflict. The second assumption was only partially substantiated, as this treatment was somewhat shorter than had been anticipated, i.e., just short of three years. Symptom relief in this case seems to bear only slight relation to the resolution of conflict, and to be much more clearly connected with her having introjected the therapist. Both at termination and follow-up, the patient reported that when depressive moods settled down upon her she was able to hear inwardly the voice of the therapist urging her to reflect about what might be making her angry. In response to this "inner voice" she would look at her current life situation, identify the event that had aroused angry feelings, and shortly experience relief of her depression. Hence some confirmation is found for statement IIA "Supportive aspects of psychotherapy achieve the result of more adaptive functioning by means of the patient's introjection of the therapist's ego and superego attributes."

14. *If* supportive-expressive psychotherapy with concomitant hospitalization, as treatment progresses, *then* the need for continued hospitalization will decrease (/) II'1.12. The rechanneling of impulses away from destructive behavior into more socially acceptable activity results in a decreasing need for hospitalization.

Outcome: Condition +, Prediction +, II'1.12 +.

Discussion

The underlying assumption tends to be supported by the fulfillment of both the contingency and the prediction proper. As the patient achieved success and gratification in her volunteer work, she was increasingly capable of independent functioning, and was able to be discharged from the day hospital.

15. *If* hospitalized, as treatment progresses, *then* after the period of a year or two, before the patient is seen on only an outpatient basis, the transition through the day hospital will be necessary (/) II'1.1 Patients with limited ego strength and anxiety tolerance, and destructive behavior, who are treated by psychotherapy in conjunction with hospitalization and who begin to modify their destructive behavior require a gradual transition to full outpatient status (through day hospital and/or foster-home placement).

Outcome: Condition +, Prediction ±, II'1.1 +.

Discussion

The prediction is not entirely fulfilled, for the transition through the day hospital did not require a year or two, but was actually accomplished in only eight months. Since the assumption does not include a time factor, it is not weakened by the failure of the prediction to be entirely confirmed.

16. As therapy progresses, *then* the patient will show an increased capacity to direct her impulses into more socially acceptable (though still narcissistically colored) channels such as the creation of a cultural "salon" etc. (/) II 1.12 Patients in supportive-expressive psychotherapy with limited ego strength, low anxiety tolerance, and limited psychological mindedness but with a strong motivation for change are unable to achieve major intrapsychic change but can achieve more socially acceptable modes of expression of unconscious conflict and therefore an improved life adjustment.

Outcome: Condition +, Prediction +, II 1.12 +.

Discussion

Fulfillment of both the contingency and the prediction proper tends to substantiate the underlying assumption.

17. *If* treated by supportive-expressive psychotherapy, as improvements in the patient's adjustment, level of functioning, and symptomatic

expressions occur, *then* these will represent changes in the intensity of the expression of her impulses and of the destructive ways in which they emerge rather than structural changes in the ego (/) II 1 Supportive aspects of psychotherapy are capable of leading to a more gratifying and adaptive adjustment via modifications in the intensity or channeling of impulse expression based on shifts in impulse-defense configurations without full conflict resolution. IB′7 To the extent that conflicts are resolved, patients are enabled to use their capacities for productive work more effectively.

Outcome: Condition +, Prediction +, II 1 +, IB′7 not tested because of failure of a treatment variable to develop as anticipated.

Discussion

Fulfillment of the contingency and the prediction proper tends to substantiate the supportive statement, but the statement regarding conflict resolution was not tested since her improved functioning could not be clearly related by the research teams to a significant degree of resolution of unconscious conflict.

OUTCOME PREDICTIONS

18. *If* treated by supportive-expressive psychotherapy, *then* certain minimal treatment goals (but no more) can be met and a better life adjustment will be effected (/) II 1.12 Patients in supportive-expressive psychotherapy with limited ego strength, low anxiety tolerance, and limited psychological mindedness but with a strong motivation for change are unable to achieve major intrapsychic change but can achieve more socially acceptable modes of expression of unconscious conflict and therefore an improved life adjustment. IIC Supportive aspects of psychotherapy achieve the result of more adaptive functioning by means of gratifying some of the patient's psychological needs which he otherwise is unable to gratify. IB′1.2 The partial resolution of unconscious conflict makes possible shifts in impulse-defense configurations which are reflected in behavioral changes.

Outcome: Condition +, Prediction +, II 1.12 +, IIC +, IB′1.2 not tested because the treatment was not as expressive as had been anticipated.

Discussion

The over-all outcome prediction was well substantiated in that the patient showed definite improvement in her life situation, even though there was only limited resolution of conflict, in accord with the first assumption. The gratification of dependency needs in the

therapy situation, mentioned in the second assumption, clearly took place through the advice and counseling that the therapist offered.

The predictors believed that unconscious conflict would be partially resolved, with resulting favorable shifts in impulse-defense configurations; this did not take place, as the treatment was less expressive than the predictors had anticipated it would be. Hence assumption IB′1.2 was not tested by this prediction's outcome.

There were a few assumptions which were tested even though they were not part of the predicting team's thinking about this case. For example, introjection of the therapist's attitudes was clearly a vehicle of this treatment, as illustrated by the patient's report that she heard the therapist's words counseling her when she was under some stress. Hence, assumption IIA 1.2 "The introjection of the therapist's ego and superego attributes, while leading to more adaptive behavior, does not resolve the pathogenic infantile conflicts to the extent of leading to mature and gratifying object relationships nor to full relief of symptoms associated with the unconscious psychological conflicts" is confirmed by the outcome. This case also confirmed assumption IIA 2 "Introjection of the therapist's ego and superego attributes is facilitated by the direct giving of advice and the expression of the therapist's opinions regarding the patient's reality problems, in the context of a positive relationship."

A further mechanism bringing about the favorable change was the corrective emotional experience which took place as the patient discovered in the therapist a kindly and sympathetic figure who contrasted with her usual expectation that parental authority figures are arbitrary and punitive, based on her early experience with her mother. This confirms assumption IID "Supportive aspects of psychotherapy achieve the result of more adaptive functioning by means of a corrective emotional experience which modifies neurotic attitudes by means of the therapist responding in a manner different from the patient's expectations based upon projections of his early introjects."

19. *If* treated by supportive-expressive psychotherapy and *if* limited goals are fulfilled, *then* the patient will break off the present marital situation (/) II 1.3. The improvement of adaptive functioning resulting from supportive psychotherapy leads to a decrease in the patient's self-destructive behavior.

Outcome: Condition +, Prediction +, II 1.3 +.

Discussion

The patient broke off the unsatisfactory marital situation and thus modified an important aspect of her self-destructive behavior. The assumption originally assigned captures the general expectations of the predictors that an over-all improvement in psychological functioning would enable the patient to exercise her own good sense in bringing her incompatible marriage to an end. In retrospect we can define somewhat more precisely a mechanism that was involved in enabling the patient to make this decision, which she had been unable to make during the many years of unsatisfactory marriage prior to treatment: IIC 2.4 (new) "Patients become able to relinquish an inappropriate marital partner when the therapist constitutes an interim object that fulfills the infantile needs whose gratification was sought in the marriage."

20. *If* supportive-expressive psychotherapy is carried to a successful conclusion, *then* at least three or four years will be required for even these minimal treatment goals to be achieved (/) II 1.2 Patients with profound neurotic conflicts, inadequately functioning defense mechanisms, low anxiety tolerance, and limited psychological mindedness require prolonged supportive treatment in order to achieve even partial freedom from painful or destructive symptoms.

Outcome: Condition +, Prediction ∓, II 1.2 ∓.

Discussion

The prediction and assumption were partly refuted since the therapy actually ran just short of three years. A postdictive assumption was required by this finding: II 1.21 (new) "The duration of supportive psychotherapy needed to restore the previous equilibrium is shortened by the diminution of the reality stresses that precipitated the illness, and the provision of new gratifications by the environment." Thus, the favorable result that ensued from the treatment was partly due to the termination of the unsatisfactory marriage and partly to her good luck in finding a job that was suited to her needs. The prediction was not quite correct because the predictors failed to consider fully the ameliorating effect divorce would have upon her psychological condition.

21. *When* at the outcome of treatment, and after the patient has come to recognize the impossibility of her current marital situation,

then the patient's anxieties will diminish (/) CIII 1 Patients whose primary symptoms are reduced in intensity experience a reduction in intensity of the associated secondary symptoms.

Outcome: Condition +, Prediction +, CIII 1 +.

Discussion

The prediction and assumption were clearly confirmed in so far as the patient's neurotic need to hold onto an ungratifying marriage (a primary symptom) abated sufficiently to permit a divorce and the patient's anxieties diminished as a result of this change. A further factor, however, contributing to the reduction of anxiety was the gratification of dependency needs in the therapeutic situation: IIC′ "The gratification of more ego-syntonic derivatives of unacceptable needs reduces the anxiety stemming from the need pressure." Despite the patient's antipathy to her dependency strivings she was able to accept some degree of such gratification.

22. At the end of treatment, after the patient has come to recognize the impossibility of the current marital situation, *then* there will be a reduction in the intensity of the patient's acting-out impulses (/) IIC 1.2 Patients with an alloplastic orientation, who in therapy realize significant gratifications, show a diminution of alloplastic behaviors. II′2.1 Patients with limited ego strength manifested by poor impulse control and poor anxiety tolerance can check their most flagrant symptoms when the environment offers controls and sanctions appropriate alternative modes of impulse expression. CID To the extent that external factors trigger intrapsychic conflicts there is a proportional enhancement of painful affects and defenses.

Outcome: Condition +, Prediction ±, IIC 1.2 ±, II′2.1 +, CID +.

Discussion

There was a general consensus that the patient became somewhat less impulsive and showed greater appropriateness of impulse expression. This result came about partly as a result of removing herself from the stress of the unacceptable marriage, partly from the gratification which she found in the therapeutic relationship, and partly from the controls provided by the total treatment situation.

23. At the end of treatment, after the patient has come to recognize the impossibility of the current marital situation, *then* there will be a

reduction in the intensity and/or frequency of her depressive swings (/) CID To the extent that external factors trigger intrapsychic conflicts there is a proportional enhancement of painful affects and defenses.

Outcome: Condition +, Prediction +, CID +.

Discussion

This change is consistent with the last two predictions concerning changes in anxiety level.

24. At the end of treatment, after the patient has come to recognize the impossibility of her current marital situation, *then* her life adjustment will become overtly more harmonious (/) II 1.31 The improvement of adaptive functioning resulting from the supportive aspects of psychotherapy leads to better interpersonal relationships and a greater capacity to work productively.

Outcome: Condition +, Prediction +, II 1.31 +.

Discussion

The patient's life adjustment clearly became more harmonious largely as a result of extricating herself from the impossible marital situation. The more satisfactory life situation which she was able to establish for herself did not reflect resolution of her core conflicts. She continued to show behavioral evidence of unresolved conflicts, in her limited interest in feminine things, her need to be constantly occupied by a full schedule, and psychological-test evidence of a need for sweeping denials of difficulties, particularly her lack of concern about the approaching menopause. This finding confirms assumption II 1.1 "Patients who achieve only a minimal resolution of conflict in response to the supportive aspects of psychotherapy effect a more adaptive adjustment, but continue to show behavioral evidence of the unresolved core conflicts."

25. *If* the patient gives up the marriage on the basis of recognizing the impossibility of maintaining it, *then* she will be willing to have the child go to the husband (/) IB′1 The successful resolution of unconscious conflict allows the patient the freedom to find the most advantageous reality setting for his own needs and for the needs of the significant others in his life. IB″1.4 Patients who gain insight into the meaning of certain situational factors which they previously denied make realistic and appropriate modifications in their lives.

Outcome: Condition +, Prediction ∓, IB′1 not tested owing to failure of a treatment variable to develop as anticipated, IB″1.4 no evidence.

Discussion

The prediction was mostly incorrect, for the patient bitterly contested the court's ruling to assign custody of the child to the husband. She eventually gave up her efforts, but not willingly. Both of the assumptions refer to the patient's coming to better terms with her underlying rejection of the feminine maternal role and hence a willingness to let the child go to his father based upon an appropriate understanding and acceptance of the needs of the child. These developments did not occur largely because the treatment was not that intensive or expressive for reasons already stated.

26. *If* treated by supportive-expressive psychotherapy and *if* successful, *then* the patient will require continued psychotherapy as she tries to cope with life "outside" (/) II1B 3 Patients who achieve only a minimal resolution of conflict in a predominantly supportive psychotherapy effect a more adaptive adjustment, but are vulnerable to some continuing life difficulties consistent with the unresolved conflicts and may require further treatment after termination.

Outcome: Condition +, Prediction —, II1B 3 —.

Discussion

This was a very significant predictive error bearing on the problem of the stability of change. Although the change was not based upon resolution of conflict, it appeared to be a fairly stable one. She did not attempt to establish continued contact with the therapist after termination of treatment. She called on the therapist only once concerning her decision to remarry. Hence, there is a weakening of assumption II1B 1 "Treatments which achieve changes in symptoms or character traits based upon the supportive aspects of psychotherapy require long-term, even if infrequent, contacts with the therapist or a therapist surrogate." An important indication of the stability of the change was the good marriage she made and her ability to find gratification and support in it. This strengthened proposition CIIIB 1 "To the extent that patients obtain gratification from their adaptive achievements, psychological changes are reinforced." However, the stability of change was not only due to the support she was finding in her new marriage, but was also based

upon the introjection of the therapist's attitudes. Hence, a postdictive assumption is required: II1B 4.1 "To the extent that a patient in a predominantly supportive psychotherapy has been able to internalize the therapist's attitudes the adaptive changes resulting from the psychotherapy will be stable."

27. *If* treatment goals are enlarged to include a better heterosexual adjustment with or without marriage, entailing a working through of her frigidity, her castrating relationships with men, etc., and working through of the deep childhood hostilities toward both her parents, *then* these will be achieved only on the basis of psychoanalysis (/) I′5.11 Treatments other than psychoanalysis for patients whose symptoms reflect lifelong deeply rooted characterological problems are not able to facilitate the resolution of all of these intrapsychic conflicts and their attendant symptoms as fully as psychoanalysis can.

Outcome: Condition −, Prediction not tested because the condition was not fulfilled, I′5.11 no evidence available bearing on this assumption.

Discussion

This prediction could not be tested because the contingency was not fulfilled. It could have been confirmed only by the patient's undergoing a course of supportive-expressive psychotherapy followed by a course of psychoanalysis, and the goals stated in the above prediction being achieved in the latter but not in the former: it could have been refuted by the resolution of these deep-seated unconscious conflicts without recourse to psychoanalysis.

28. *If* treated by supportive-expressive psychotherapy and *if* maximally successful, *then* the patient will not continue to a more thoroughgoing reconstructive therapy like psychoanalysis (/) IA′2.41 Patients with limited ego strength and deep-seated characterological problems who become comfortable through a predominantly supportive treatment do not seek a more thoroughgoing reconstructive expressive psychotherapy.

Outcome: Condition +, Prediction +, IA′2.41 +.

Discussion

The positive result the patient achieved in a predominantly supportive psychotherapy did indeed make her less disposed toward further treatment.

29. *If* treated by supportive-expressive psychotherapy, *then* her basic character traits will not change but the intensity of their expression and the destructive (both to herself and to others) ways in which they emerge will be dampened (/) II 1 Supportive aspects of psychotherapy are capable of leading to a more gratifying and adaptive adjustment via modifications in the intensity or channeling of impulse expression based on shifts in impulse-defense configurations without full conflict resolution.

Outcome: Condition +, Prediction +, II 1 +.

Discussion

The patient continued to show the same underlying conflicts, including difficulty in accepting her femininity, phallic competitiveness, and strong oral wishes; she continued to react depressively and impulsively at times. But the intensity of her symptoms had shown a significant abatement without extensive work in the direction of resolving conflict.

30. *If* treated by supportive-expressive psychotherapy, *then* she will be able to use such things as her art more successfully as sublimatory activities (/) II To the extent that a psychotherapy is supportive, it involves a strengthening of certain defenses and a concomitant strengthening of the adaptive capacities of the patient's ego.

Outcome: Condition +, Prediction +, II +.

Discussion

The patient was indeed able to make better use of her latent capacities in art and in teaching.

31. *If* treated by supportive-expressive psychotherapy, *then* the patient will develop insight into the nature of her symptomatic patterns and their impact upon herself and her environment, but will not develop insight into the underlying mechanisms and early determinants of her symptomatic pattern (/) II 1 A Patients in supportive psychotherapy achieve limited insight into the maladaptive solutions they have been using, even less insight into the content of their unconscious conflicts, and still less into the underlying mechanisms and early determinants of their conflicts.

Outcome: Condition +, Prediction ±, II 1 A +.

Discussion

The patient developed some insight but less than was predicted; hence, the prediction was only partially confirmed. One of her primary insights was into the mechanism of her depressions, i.e., the fact that depression usually meant that she was angry at someone. This insight seemed to be deeply impressed upon her, so that following treatment she used it with some success in coping with depressive periods. The assumption concerning the extent of insight in psychotherapy with a limited goal was essentially confirmed.

APPENDICES

What follows are the evidence statements for the predictions made about Mrs. X. It may be recalled (see pp. 16, 17, 92) that these statements were scored by the Initial Study Team, as they anticipated them being scored by subsequent observers at termination and follow-up. A blank form was given at termination to the Treatment Variables Team (TV 1), the Situational Variables Team (SV 1), the therapist, and the supervisor (if one was involved). Their answers are presented here in composite form. At the time, however, these answers were recorded without knowledge of those of the Initial Study Team or of one another. At follow-up, the Treatment Variables Team (TV 2) and Situational Variables Team (SV 2) scored the evidence forms again, without access to their own or to others' previous scoring.

$+$ means that the evidence statement is true.

$-$ means that it is false.

$\pm$ means it is mostly true.

$\mp$ means it is mostly false.

NE means evidence is lacking about the statement.

DA means it does not apply.

* calls attention to comments (not included in the present data) such as disagreements among team members, criticisms of the wording of evidence statements, explanatory remarks, etc.

C means that the answer given is contingent upon some other evidence statement.

? means the research team remained doubtful about their scoring.

Appendix A

Form E: Individualized Evidence Form

	INIT	TV*1	SV 1	THER	TV 2	SV 2
1. The role of the hospital doctor rapidly became peripheral as the psychotherapy became the central focus for the patient.	−	−	+	+	−*	DA
2. The hospital doctor continued to play an essential role for a considerable time span, carrying many of the supportive aspects of the treatment.	+	+	+	+	−*	DA
3. Despite the presence of a hospital doctor, the therapist had to play a strongly supportive role in the patient's life.	−	+	+	−	+	DA
4. Because of the presence of a hospital doctor the therapist was enabled to make the psychotherapy more fully expressive.	+	−*	±	+	−DA**	DA
5. The treatment remained on a three-times-a-week basis for the most part.	+	+	+	+	+	DA
6. It was felt indicated to increase the frequency of the hours.	−	−	−	−	−	DA
7. It was felt indicated to decrease the frequency of the hours.	−	−	−	−	−	DA
8. The patient could become an outpatient within a year or two after transition through the day hospital.	+	+	+	+	+	DA
9. A major treatment goal achieved was that of a more satisfying and less conflict-ridden adjustment to the same kind of life the patient had previously had.	+	+	+	+*	−DA**	DA
10. The patient reached decision during treatment to discontinue her marriage.	+	+	−	+*	+	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
11. The patient was unable in treatment to effect a resolution of the conflicting ties to the large city and continued after treatment in much the same arrangements as she had before.	−	−	−	±*	−	−
12. The patient resolved the ties of neurotic gratification and guilt experienced in relation to her marriage in such a way as to enable her to continue within the marriage.	−	−	−	−	−	−
13. The patient gave up the idea of the cultural and aesthetic life in the large city in order to consolidate herself within her marriage.	−	−	−	−	−DA	−
14. The patient's present living arrangements include gratification of her aesthetic, intellectual, and cultural interests in a large, urban setting.	+	+	+	+	−+	+
15. The patient faced in the treatment the neurotic dilemma posed by the different needs represented by the life in the large city and the tie to her husband's hometown in such a way as to choose one or the other.	+	−	+	+*	−	DA
16. The patient effected a harmonious resolution of these conflicting pulls through working out underlying intrapsychic conflict.	−	−	−	±	−DA	DA
17. Treatment resulted in a diminution of the patient's anxieties.	+	+*	±	+	+	+
18. The depressive swings have been undiminished in intensity.	−	−	−	−	−	−
19. The over-all life adjustment is overtly more harmonious.	+	+	±	+	+	+
20. In the breakup of the marriage, the child went with the husband.	+	+	+	+	+	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
21. The child's going to the husband was fought over bitterly between the two parties.	−	±*	−	+	−	−
22. The patient has remarried (or taken as a lover) somebody of similar cultural interests and possibly culturally employed.	+	+	±	+	+*	+*
23. The child was much conflicted over which parent to choose.	−	NE	−	−	−?NE	DA
24. The patient's second marriage is as narcissistically colored as the first, but with the narcissism differently channeled (in the elegance of their living, in the cultural atmosphere they create for themselves and their friends, and in the narcissistic gains in being a good hostess).	+C*	−**	C***	−***	+	+
25. The patient's continued narcissism was great enough to preclude a remarriage.	−	+	−*	−	−	−
26. The patient was able to achieve a remarriage based on real sharing and mutuality in meeting each other's needs.	−	−	C*	−	+*	±
27. The patient was "successful" in her premature disruption of the treatment process.	±	−	±	−	−	DA
28. The patient created a split between the therapist and the hospital severe enough to lead to treatment disruption.	±	−	−	−	−	DA
29. Despite her efforts to do so, it was not possible to split the therapist off from the hospital treatment and management.	±	+	+	+	+	DA
30. The patient became depressed enough to warrant ECT again, during which, however, it was possible to continue her psychotherapy.	±	−	−	−	−DA	DA
31. The patient became depressed enough (and was unresponsive enough to the usual measures for depression) so as to preclude further psychotherapy.	±	−	−	−	−	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
32. The patient impulsively broke out of the hospital and out of treatment.	±	−	−	−	−	DA
33. Despite long-term treatment the patient never achieved real introspective capacity or any substantial ability to delay impulse discharge.	−	+	+	−	*	−
34. The patient achieved a better heterosexual adjustment (with or without marriage) through a working through of her castrative relationships with men.	−	−	−	+	−DA*	Don't Know
35. The patient's sexual frigidity continued relatively unchanged.	+	NE*	+	−	+NE**	NE
36. Deep childhood hostilities toward both parents were brought into the treatment situation.	−	−	±	+	+	DA
37. Underlying infantile hostilities toward the mother were worked with (but not in relation to the father).	−	+	+	+	−*	DA
38. Underlying infantile hostilities toward the father were worked with (but not in relation to the mother).	−	−	−	±*	−**	DA
39. The patient achieved increased capacity to direct her impulses into more socially acceptable (though still narcissistically colored) channels such as the creation of a cultural "salon," etc.	+	±	−	+	+	−
40. This enhanced capacity to direct her impulses into more socially acceptable channels reflects underlying structural changes in the ego.	−	−	−	±	−	−
41. The transference readily evolved in the direction of a transparent repetition of the neurotic life problem on the outside with the situation between therapist and hospital physician set up as a duplication of the ties to the husband and to the lover, with all that each represented.	+	+	*	+	+	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
42. The hospital doctor was perceived as somewhat cruel and arbitrary, a person to whom she was bound by reality ties.	+	+	+	+	+*	DA
43. The hospital doctor was seen as a comforting and admiring protector.	–	–	–	–	–	DA
44. The therapist was cast in the role of the intellectual, cultured, sophisticated admirer, giving her unending narcissistic supplies on her own terms as a talented, superior person.	+	–	–	+	–	DA
45. The therapist was seen initially as someone smug and superior, who failed to give her her deserved narcissistic supplies.	–	–	+	±	+	DA
46. These early transference maneuvers dictated by the repetition compulsion failed in their unconscious intent.	+	–	–	+	–DA*	DA
47. The patient reacted to this frustration with deepening depression and withdrawal.	±	–	–	–	–DA	DA
48. The patient reacted to this frustration with the mobilization of great anger.	+	+*	–	+	–	DA
49. The patient precipitously broke off treatment over this frustration and fled to her husband, trying to patch things up with him.	–	–	–	±*	–	DA
50. The patient precipitously broke off treatment over this frustration and returned to the city to try to pick up where she left off before.	±	–	–	±*	–	DA
51. The patient reacted to this frustration by a complete turnabout of the acting out and reversing the transference roles assigned to the hospital doctor (now the one at whom the seduction is directed) and the therapist (now the object of the vituperation).	±	–	–	±	–	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
52. When frustrated by the therapist, the patient tried to get the hospital doctor to side with her against him.	+	−	−	±	−*	DA
53. The patient steadfastly maintained her image of the hospital doctor as the cruel reality-compelling controller.	−	+	+	+	+	DA
54. The patient precipitously broke off treatment and fled to her lover.	±	−	−	−	−	DA
55. The patient continued to have depressive episodes, though never severe enough to require further ECT.	+	−	±	+	+	DA
56. Continued depressive episodes were severe enough to warrant ECT.	±	−	−	−	−	DA
57. As the therapy progressed, cycles of depression and acting out continued with undiminished intensity through to the very end.	−	−	−	−	−	DA
58. With progress in therapy, each swing through the cycle was of lessened intensity.	+	−	+	+*	+	DA
59. The patient never developed any awareness of the consequences of her actions either for herself or for those against whom they are directed.	−	+	−	−	−	DA
60. The possible playing off of the therapist against the hospital doctor never became a significant resistance in treatment.	+	±*	+		+	DA
61. Poor impulse control and low anxiety tolerance were always a major resistance.	+	+	±	+	−	DA
62. The need to hold onto the narcissistic image of herself as a talented and never quite appreciated person proved much less of a resistance in the treatment process than had initially been anticipated.	−	+	Don't Know	−	+	DA
63. Rather, the strength of the aggressions and hostilities and concomitant guilt were the major treatment resistances.	+	−	+	±	−*	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
64. For a long period of time it was nearly impossible for the patient to bear guilt feelings without acting out.	+	—	—*	±	—	DA
65. The development of a really useful transference relationship was made difficult and burdened by a long period of suspicion and doubt.	+	—	—*	±	—	DA
66. Guilt emerged as a major symptom during the treatment even though it had been notably absent in her prior life.	+	—	—*	±	—	DA
67. The guilt that emerged in treatment was mainly in relation to the realities of the mess that she has created for herself and others.	+	—	—*	+	—DA	DA
68. The guilt that emerged in treatment was beyond that realistically called for in relation to the realities of her neurotically created difficulties and reflective more of neurotic guilt generated by her earlier hostilities.	±	—	—*	±	—DA	DA
69. Early in the course of treatment mood swings and symptom swings quickly disappeared (as the patient got involved in the transference).	—	+	—	—	—	DA
70. As a result of treatment, some of the patient's activities, such as her painting, could be more successfully used as sublimatory activities.	+	+	±	+	+	±
71. Whatever insights were achieved preceded any real change in her patterns and were followed by considerable periods of testing out.	+	—	Don't Know	+	—	DA
72. Insights achieved came only after some change in her patterns had been effected and after considerable testing out made it possible to see them clearly.	—	—	—	—	—	DA

Form E-2

(Additions to Form E based on additional data available)

	INIT	TV*1	SV 1	THER	TV 2	SV 2
1. The patient achieved the treatment goal of marrying someone of similar cultural interests and being a good hostess, though in a narcissistically colored and rewarding way.	−	−	−	+	+	+
2. The patient achieved a single life (on an "asexual" level) consisting of living with some other woman in similar circumstances, concert going, eating in fancy restaurants, supplementing her income by teaching, etc.	+	−	−	−*	−	−
3. Therapy never succeeded in helping the patient resolve her ambivalently held wishes to achieve femininity in the more usual sense.	+	+	+	+	−	−
4. The patient achieved (and was satisfied with) the giving up of the conventional "feminine" impulses and achievements in favor of a more cultural and "asexual" life.	+	−	−	±	−	−
5. A major treatment difficulty was a peculiar psychological elusiveness, used to ward off psychological mindedness and reflectiveness.	+	+	+	+	+*	DA
6. The patient was unable to get behind this elusiveness to the perception of the emptiness of much of her life.	+	+	±	+	−	DA
7. The patient did succeed in reaching these insights and was at this point overwhelmed with feelings of guilt, emptiness, and annihilation.	−	−	−	±	−	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
8. Every effort was made (and successfully so) to prevent the patient coming to these threatening insights because of the seriousness of the ego rupture which might then threaten.	±	−	−	+	−	DA
9. The therapeutic outcome can be conceptualized as involving *no change* in character at all, but rather an *acceptance* of her character structure as it is with the giving up of the conflictual debris surrounding it.	+	+	+	+*	−**	+
10. The patient was never able to resolve the inner contradictions and splitting of her personality in several directions at once throughout the entire course of the therapy.	−	+	+	−	−*	DA
11. The patient did succeed in giving up wishing to be otherwise, or trying to appear as if she were otherwise, and the symptoms associated with those conflicts then disappeared.	+	−	+	+	−*	±
12. The entire therapeutic course unfolded without the evocation of guilt as a major symptom.	+	+	+		+	DA
13. It was impossible to treat this woman at all successfully, even to minimum goals, without her inevitably suffering considerable guilt, which indeed became focal in the course of treatment.	−	−	−	±	−	DA
14. Treatment could be successfully carried through to the attainment of goals acceptable to the patient without evoking serious guilt feelings (through the protection of the pervasive narcissism of this woman).	+	+	±	−	+	DA

	INIT	TV*1	SV 1	THER	TV 2	SV 2
15. Dynamically the depressive episodes could be understood (as worked out in the therapy) as self-directed aggression on the basis of self-punishment in accord with classical concepts.	—	—	—	—	—	DA
16. Dynamically the depressive episodes could be understood (as worked out in the treatment) as primarily frustrations of narcissistic wishes corresponding to loss of narcissistic supplies.	+	+*	±C**	+	+	DA
17. The achieved level of insight was very sharply circumscribed because of the severe painfulness of insights that must be defended against.	+	+	+	+	—DA	DA
18. A major way of protecting herself against meaningful insights was through intellectualization and narcissistic embellishment.	+	+	+	+	+	DA

Appendix B

Form E: Core Statements

Nature of Treatment	INIT	TV*1	SV 1	THER	TV 2	SV 2
1. The treatment may best be described as classical psychoanalysis.	—	—	—	—	—	
2. The treatment ultimately evolved into a psychoanalytic procedure.	—	—	—	—	—	
3. Conversion to psychoanalysis was seriously considered, but decided against.	—	—	—	—	—*	
4. Conversion to psychoanalysis was never seriously considered.	+	+	C	+	—*	
5. Though psychoanalysis was attempted, it became necessary to switch to face-to-face psychotherapy.	DA	—	—	DA	—DA	
6. The treatment may be described as falling in the category of expressive psychotherapy.	—	—	±	—	—	
7. The treatment may be described as falling in the category of supportive-expressive psychotherapy.	+	+	+	+	+	
8. The treatment may be described as falling in the category of supportive psychotherapy.	—	—	±	—	—	
9. The treatment evolved in the direction of a more purely expressive psychotherapy.	+?	—	+	+	—	
10. The treatment moved in the direction of becoming less expressive and more supportive.	—	—	—	—	—	

	INIT	TV*1	SV 1	THER	TV 2	SV 2
11. The treatment remained very strongly supportive up to the end.	−	+*	+	−	+	
12. The treatment course was relatively long (over 3 years).	+	−	−	+	−	
13. The treatment course was relatively short (under 1½ years).	−	−	−	DA	−	
14. The treatment course was of average length (1½ to 3 years).	−	+	+	DA	+	
Transference						
15. The patient quickly became involved in the transference relationship.	−	+*	±	+	−	
16. There was a long period of therapy before the patient was able to become involved in the transference.	+	−	±	−	−	
17. Real transference involvement was never achieved.	+?	−	−	−	+	
18. Transference phenomena constituted a resistance of such a nature as to require special modification of technique.	+?	−	Don't Know	−	−	
19. Transference phenomena constituted a resistance of such a nature as to lead to treatment disruption.	+?	−	+?	−	−	
20. Interpretation was the primary means employed in the resolution of transference phenomena.	−	−	−	+	−DA	
21. The transference relationship proved to be a sufficient therapeutic asset so that treatment goals could be enlarged (and treatment techniques modified accordingly).	−	−	Don't Know	+?	−DA	
22. The transference relationship was an essential vehicle of the therapy (and of the therapeutic improvement) and was deliberately left somewhat unresolved.	+	±*	+?	+	−	

	INIT	TV*1	SV 1	THER	TV 2	SV 2
23. The transference relationship was an essential vehicle of the therapy (and of the therapeutic improvement) but could not itself be worked through and resolved.	−C*	−**	+	DA	−	
Symptoms						
24. The patient became transitorily more seriously disturbed during the course of treatment.	+?	−	−	+	−	
25. At one or more points in the treatment hospitalization was considered but was not carried out.	+?	−	−	+	−	
26. It was necessary during the course of psychotherapy for the patient to enter the hospital.	+?	−	−	−	−	
27. The patient was able to move fairly rapidly from a supervised and structured status (such as either hospital, family-care home, or substantial use of day hospital) to a more autonomous functioning.	−	±*	+	+	+	
28. The patient had to remain within a supervised setting (such as either hospital, family-care home, or substantial use of day hospital) for a major part of the treatment course.	+	±	−	−	−	
29. Hospitalization was needed periodically during the patient's course of treatment.	+?	−	−	−	−	
30. The following symptoms were prominent in the early stages of treatment:						
a. hysterical dissociation	+	−		−	−	
b. conversion	−	−		−	−	
c. anxiety states	+	±*	+**	−	+	
d. phobias	−	−		−	−	
e. compulsions	−	−		−	−	
f. obsessions	−	−		−	−	
g. addiction (alcoholic)	−	−		−	−	
h. addiction (drug)	−	−		−	−	
i. sexual disorders (neurotic)	+	NE*		+	−NE**	

	INIT	TV*1	SV 1	THER	TV 2	SV 2
j. sexual deviation (perversion)	−	−		−	−	
k. interpersonal difficulties	+	±	+*	+	+	
l. work inhibitions	+	−		−	+	
m. hypochondria	+	−		−	−	
n. psychosomatic disorders	+	−		−	−	
o. depression	+*	±	+	+	+	
p. psychotic depression	+	−		+	−	
q. manic behavior	−	−		+?	−	
r. thought disorder	−	−		+	−	
s. severe impairment of reality testing	+	−		+	−	
31. The following personality devices were present at the beginning of treatment to a degree placing them virtually in the same category as symptoms. (It is not intended that these be utilized where they operate chiefly as the underlying mechanisms of overt symptoms.)						
a. repression	+	−*	+	−	−	
b. denial	+	+	+	−	+	
c. inhibition	−	−		−	−	
d. phobic behavior	−	−		−	−	
e. counterphobic behavior	−	−	+	−	−	
f. reaction formation	−	−	+	−	−	
g. isolation	−	+*		−	+	
h. intellectualization	+	+		+	+	
i. obsessiveness	−	−		−	−	
j. compulsiveness	−	−		−	−	
k. somatization	+	−		−	−	
l. projection (and externalization)	−	±*	+	+	+	
m. outwardly directed aggression	+	+*	+	+	+	
n. passive aggression (stubbornness, pouting, etc.)	+	+	+	+	+	
o. passivity	−	−		−	−	
p. masochistic interactions	−	−	+	−	+	
q. impulsiveness	−	+	+	+	+	
r. alloplastic behavior	+	+	+	+	+	
32. The following symptoms continued to be prominent throughout the course of treatment:						
a. hysterical dissociation	+	−		DA	−DA	
b. conversion	DA	−		DA	−DA	
c. anxiety states	+	−*	+**	DA	−DA	
d. phobias	DA	−		DA	−DA	
e. compulsions	DA	−		DA	−DA	
f. obsessions	DA	−		DA	−DA	

	INIT	TV*1	SV 1	THER	TV 2	SV 2
g. addiction (alcoholic)	DA	–		DA	–DA	
h. addiction (drug)	DA	–		DA	–DA	
i. sexual disorders (neurotic)	+	NE*		+	–DA	
j. sexual deviation (perversion)	DA	–		DA	–DA	
k. interpersonal difficulties	+	+	+	+	+	
l. work inhibitions	+	–		DA	–DA	
m. hypochondria	–	–		DA	–DA	
n. psychosomatic disorders	–	–		DA	–DA	
o. depression	±*	–	+	+	+	
p. psychotic depression	+?	–		–	–DA	
q. manic behavior	DA	–		+?	–DA	
r. thought disorder	DA	–		+?	–DA	
s. severe impairment of reality testing	+?	–		–	–DA	
33. The following symptoms have not been relieved by the treatment:						
a. hysterical dissociation	–	DA		DA	–DA	
b. conversion	DA	DA		DA	–	
c. anxiety states	–	–	+*	DA	–DA	
d. phobias	DA	DA		DA	–DA	
e. compulsions	DA	DA		DA	–DA	
f. obsessions	DA	DA		DA	–DA	
g. addiction (alcoholic)	DA	DA		DA	–DA	
h. addiction (drug)	DA	DA		DA	–DA	
i. sexual disorders (neurotic)	+	NE		+	–DA	
j. sexual disorders (perversion)	DA	DA		DA	–DA	
k. interpersonal difficulties	±	±	+	+	+	
l. work inhibitions	–	DA		DA	–DA	
m. hypochondria	–	DA		DA	–DA	
n. psychosomatic disorders	–	DA		DA	–DA	
o. depression	–*	–**		+?	+	+
p. psychotic depression	–	DA		–	–DA	
q. manic behavior	DA	DA		–	–DA	
r. thought disorder	DA	DA		–	–DA	
s. severe impairment of reality testing	–	DA		–	–DA	
34. The following personality devices were present upon termination of treatment to a degree placing them virtually in the same category as symptoms. (It is not intended that these be utilized where they operate chiefly as the underlying mechanisms of overt symptoms.)						
a. repression	±	–*	+	DA	–DA	+
b. denial	±	+	+	DA	+	+
c. inhibition	DA	–		DA	–DA	
d. phobic behavior	DA	–		DA	–DA	

	INIT	TV*1	SV 1	THER	TV 2	SV 2
e. counterphobic behavior	DA	—		DA	—DA	
f. reaction formation	DA	—*		DA	—DA	
g. isolation	DA	+		DA	+	
h. intellectualization	+	+		—	+	
i. obsessiveness	DA	—		DA	—DA	
j. compulsiveness	—	—		DA	—DA	
k. somatization	DA	—		DA	—DA	
l. projection (and externalization)	DA	+		—	—DA	
m. outwardly directed aggression	±	±	+	+?	±	
n. passive aggression (stubbornness, pouting, etc.)	±	+*	+	+?	±	
o. passivity	DA	—		DA	—	
p. masochistic interactions	DA	—		DA	+	
q. impulsiveness	DA	+		+?	±	
r. alloplastic behavior	—	+	+	—	±	
Behavior						
35. The patient shows a greater capacity to control impulses.	+	±*	+	+	±	+
36. At the termination of treatment there was greater appropriateness of impulse expression.	+	±*	±	+	+	+
37. Alloplastic behavior diminished fairly early in the treatment.	—	—	—	+?	—	
38. Alloplastic behavior emerged during the course of treatment.	+	—	C*	±	—DA**	
39. Alloplastic behavior remained a major problem throughout most of the treatment.	+?	+*	+	±	+	
40. Alloplastic behavior was a problem to a degree that necessitated special modifications of the originally prescribed treatment in order to cope with it.	+?	—	+	—	—	
41. Alloplastic behavior occurred to a degree that neither psychotherapeutic nor management interventions could adequately cope with it.	—	—	C*	—	—	
42. Alloplastic behavior occurred to such an extent that psychotherapy had to be interrupted.	+?	—	—	—	—	

	INIT	TV*1	SV 1	THER	TV 2	SV 2
Insight						
43. The patient's understanding of his own problems is markedly changed.	±	−	−	+	±*	−
44. The amount of insight achieved as a consequence of therapy is						
a. marked	−	−		−	−	
b. moderate	−	−		+	−	
c. slight	+	+	+	−	+	+
45. The patient acquired a considerable range of insight into the nature of symptomatic patterns and their impact upon others and self.	+	−*	−	+	−	±
46. The patient acquired a considerable range of insight not only into the nature of symptomatic patterns but into their underlying mechanisms as well.	±	−	−	+	−	±
47. The patient acquired a considerable range of insight into the early determinants of his neurotic conflicts.	−	−	−	+?*	−	−
Structural change						
48. As a result of treatment, many basic character traits changed markedly as reflections of resolution of underlying conflicts.	−	−	−	−	−	−
49. There has been a major shift in the basic impulse-defense configurations.	−	−	−	+?	±*	−
50. Basic impulse-defense configurations never really changed, though their behavioral manifestations have been modified so that their deleterious impact (on others and the self) has been dampened.	+	+*	+	+	+	+
51. There has been no real change in the basic impulse-defense configurations. Though their external manifestations may have shifted, they are equally pathological.	+?	+*	±	−	±	+

	INIT	TV 1	SV 1	THER	TV 2	SV 2
52. The changes which took place were mainly in the relief of symptoms.	+	+	+	−	±	+
Termination						
53. Treatment was terminated when the therapist and patient agreed the treatment goals had been achieved.	+?	±*	±	+	±	
54. Treatment was terminated when the therapist and patient agreed that even though some more could be accomplished, other circumstances warranted termination.	+?	±*	±	−	±**	
55. The patient precipitated termination.	+?	−*	±	−	−	
56. The patient was extremely resistant to the termination of treatment.	−	−	−	−	−	
57. Treatment was terminated by circumstances beyond the patient's control.	−	−	−	−	−	
58. The patient has continued psychotherapy elsewhere as a planned extension of his treatment here.	+	−	−	−	−DA	−
59. The patient has sought treatment elsewhere after discharge from treatment here.	+	−	−	−	−	−
60. The patient satisfactorily terminated treatment here and needed no further psychotherapy.	−	−	−	+	+	−
61. The patient has not had additional psychotherapy, although this appears indicated.	−	NE*	+	−	−DA	−
62. The patient has reapplied for treatment here.	−	−	−	−	−	−
Outcome						
63. The limited treatment goals that were set were:						
a. exceeded	−	−		+?	−	
b. reached	+	+*	+	+	±	+
c. not met	−	−		−	−	

	INIT	TV*1	SV 1	THER	TV 2	SV 2
64. Treatment goals geared to the complete resolution of the patient's problems were:						
a. exceeded	DA	DA	C*	–	–	
b. reached	DA	DA	C*	+?	–	
c. not met	DA	DA	C*	–	+	+
65. The patient's relationships have improved						
a. not at all	–	–		–	–	
b. somewhat	+	+	±	–	+	
c. markedly	–	–		+	–	+
66. The patient's relationships to the significant figures in his life are now *less* neurotically determined.	+	–	–	+	–	–
67. The patient now maintains closer interpersonal relationships.	±	–	–	+	+*	+
68. The patient's interpersonal relationships are now more distant.	+C*	–	–	–	–	–
69. The patient is able to express his aggressions more appropriately						
a. not at all	–	–		–	–	
b. somewhat	+	+	±	–	+	+
c. markedly	–	–		+	–	
70. The patient's formerly excessive expression of aggressions has now become more appropriately modulated.	+	±*	±	+	+**	±
71. The patient's formerly excessive inhibition of aggressions has now become more appropriately modulated.	DA	NE	–	–	–DA	±
72. The patient is able to express his libidinal impulses more appropriately						
a. not at all	–	+	+	–	–	
b. somewhat	+?	–		+	+	+
c. markedly	–	–		+?	–	
73. The sexual *behavior* of the patient appears to be more genital.	+?	NE*	–	+	NE**	NE
74. There are still major disturbances in sexual behavior.	+	NE	+	+?	NE*	NE

	INIT	TV*1	SV 1	THER	TV 2	SV 2
75. Improvements have taken place in the patient's life circumstances in the following areas (check those which have changed):						
a. home situation	+	−	+	+*	+	+
b. living arrangements	+		+	+	+	+
c. vocation	+	+		+	+	+
d. financial	DA		+	+?	+	+
e. interests	+			+?	+	+
f. general health	+	+		+?	−	+
76. Deterioration has taken place in the patient's life circumstances in the following areas (check those which apply):						
a. home situation	−	−	−	−	−	−
b. living arrangements	−	−	−	−	−	−
c. vocation	−	−	−	−	−	−
d. financial	DA	−	−	−	−	−
e. interests	−	−	−	−	−	−
f. general health	−	−	−	−	−	−
77. The patient is satisfied with the outcome of his treatment.	+	±*	±	+	+	+
78. The patient's feeling about the outcome of his treatment is justified.	±	±	+	+	±	±

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